

# ENVIRONMENTAL TEST REPORT

**Report Reference No. ....: LR500171304B**

**Applicant .....: 주식회사 신우테크**

**Manufacturer .....: 주식회사 신우테크**

**Test item Description .....: PAN/TILT DRIVER**

**Basic model name .....: SPT-8080**

**Data of issue .....: 2013-04-10**

This test report is issued under the authority of:

The test was supervised by:



Sun-woo kang / Test Engineer

Ki-Kwan Chun / Technical Manager

This test result only responds to the tested sample. It is not allowed to copy this report even partly without the allowance of the test laboratory. This report must not be used by the applicant to claim product endorsement by any agency.

---

▶ **Table of contents** ◀

<b>1. Client details .....</b>	<b>3</b>
<b>2. Laboratory details .....</b>	<b>4</b>
<b>3. Summary of test results .....</b>	<b>5</b>
<b>4. Description of E.U.T. ....</b>	<b>5</b>
<b>5. List of test Equipments.....</b>	<b>5</b>
<b>6. Test results .....</b>	<b>6</b>
<b>6.1 온도 시험 (-40, 70 °C) .....</b>	<b>6</b>
<b>6.2 내후성 시험 .....</b>	<b>8</b>
<b>6.3 내염성 시험 .....</b>	<b>10</b>
<b>Appendix 1: Photographs .....</b>	<b>11</b>

---

## 1. Client details

### Applicant

Name .....: 주식회사 신우테크  
Address .....: 인천광역시 부평구 일신동 90-43  
Telephone No. ....: 032-515-8190  
Facsimile No. ....: 032-515-8189

### Manufacturer

Name .....: 주식회사 신우테크  
Address .....: 인천광역시 부평구 일신동 90-43  
Telephone No. ....: 032-515-8190  
Facsimile No. ....: 032-515-8189

---

## 2. Laboratory details

### Company

**Name .....** LTA Co., Ltd.  
**Address .....** 243 Jubug-ri, Yangji-Myeon, Youngin-Si, Kyunggi-Do,  
449-822 Korea  
**Telephone No. ....** +82-31-323-6008  
**Facsimile No. ....** +82-31-323-6010  
**Homepage .....** <http://www.ltalab.com>  
**e-mail .....** [lta@ltalab.com](mailto:lta@ltalab.com)

Quality control in the testing laboratory is implemented as per ISO/IEC 17025 which is the “General requirements for the Competence of testing and calibration laboratories”.
--

### 3. Summary of test results

#### 3.1 Modification to the E.U.T.

- None

#### 3.2 Test items & results

Test items	Reference rule	Result
온도 시험 (-40, 70 °C)	-	Passed
내후성 시험	KSC0285	Passed
내염성 시험	KSCIEC 60068-2-52	Passed

### 4. Description of E.U.T.

#### 4.1 Production description

Manufactured by .....: 주식회사 신우테크

Test requested by .....: 주식회사 신우테크

Type of equipment .....: PAN/TILT DRIVER

Model name .....: SPT-8080

EUT grade .....: Production grade

Sample no. ....: #1

### 5. List of test Equipments

#### 5.1 List of test Equipments

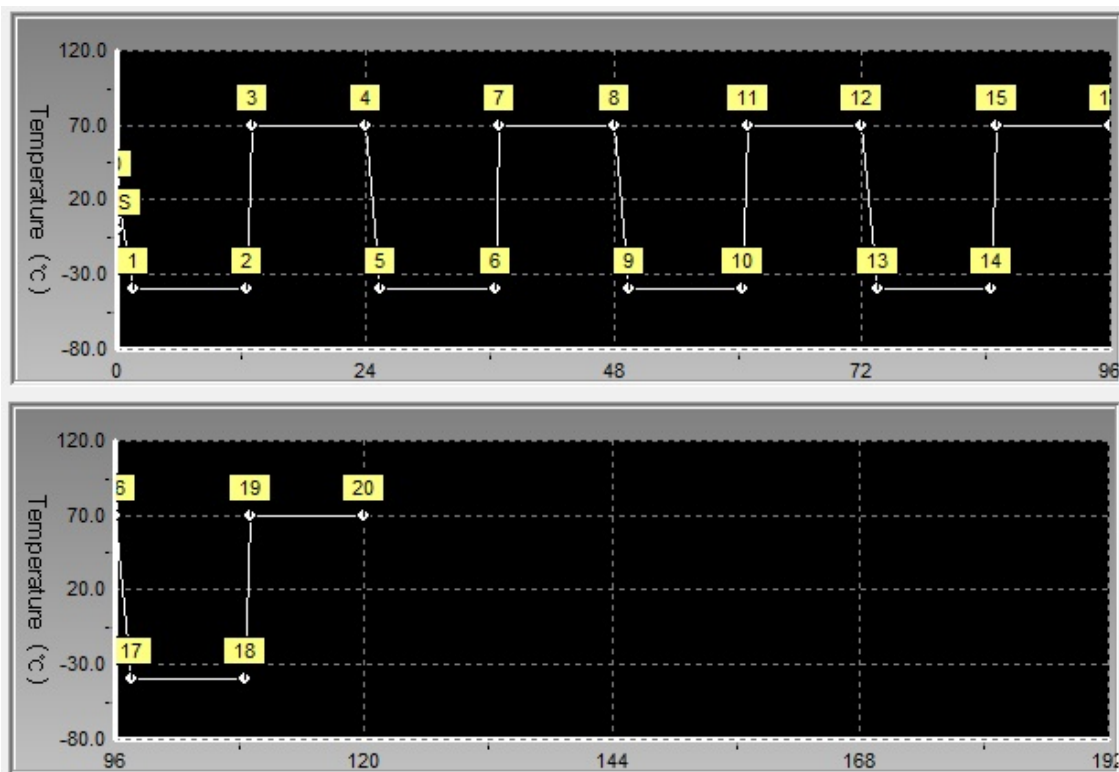
Description	Model	Serial No.	Manufacturer	Cal. Last	Cal. Due
Temp.&Humi. Chamber	KR-1005C	KRAD010129-11 CH	Korea QMS	2012-08-06	2013-08-06

## 6. Test results

### 6.1 온도 시험 (-40, 70 °C)

#### 6.1.1 Test conditions

temperature [°C]	humidity [%]	Test duration [h]
-40 ~ 70 ± 2 (5 cycle)	0	120



- 제품의 특성, 성능의 변화가 없을 것

#### 6.1.2 Test result

Not unusual (Pass)

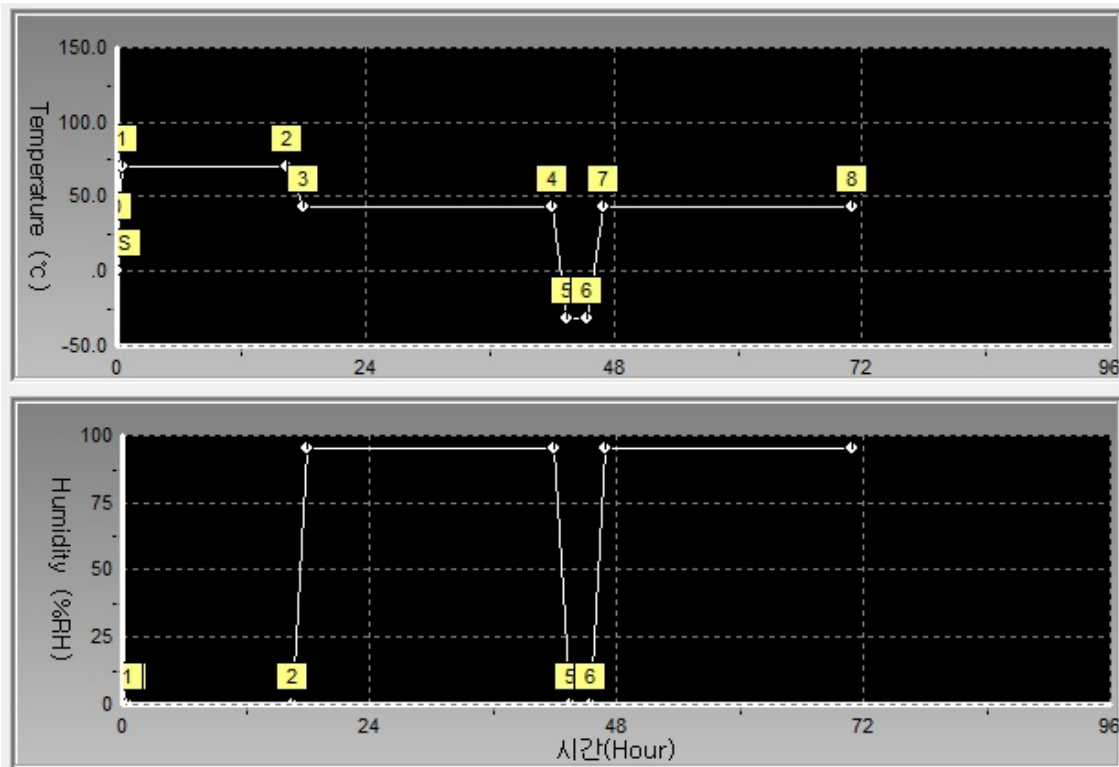
### 6.1.3 Test photograph



## 6.2 내후성 시험

### 6.2.1 Test conditions

temperature [°C]	Reference rule	humidity [%]	Test duration [h]
70	KSC0285	0	16
43	KSC0285	95	24
-32	KSC0285	0	2
43	KSC0285	95	24



- 제품의 특성, 성능의 변화가 없을 것

### 6.2.2 Test result

Not unusual (Pass)



### 6.2.3 Test photograph



## 6.3 내염성 시험

### 6.3.1 Test conditions

Reference rule	Test duration [h]
KSCIEC 60068-2-52	336

- 시험 종료 후, 흐르는 물 (15 °C ~ 40 °C)에 7분간 부드러운 솔로 세정 후 1시간 건조한 다음 판정.

### 6.3.2 Test result

Not unusual (Pass)

### 6.3.3 Test photograph



## APPENDIX 1

### Photographs

