

TEST REPORT



CTK Co., Ltd.

5 Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si,
Gyeonggi-do, Republic of Korea
Tel: +82-31-339-9970
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REPORT No.:
CTK-K-2024-00814
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1. Applicant

- Name : Hanwha Vision Co., Ltd
- Address : 6 Pangyo-ro 319Beon-gil, Bundang-gu, Seongnam-si,
Gyeonggi-do, 13488 KOREA
- Date of Receipt : April 03, 2024

2. Manufacturer

- Name : Hanwha Vision Co., Ltd

3. Use of Report :

For customer submission

4. Test sample / Model :

NETWORK CAMERA /QNO-7082R,

5. Date(s) of test :

May 13, 2024 ~ May 19, 2024

6. Test Standard (Method) used :

IEC 60068-2-2:2007

IEC 60068-2-1:2007

IEC 60068-2-30:2005

7. Testing Environment :

Temperature: (25 ±10) °C, Humidity: (50 ±25) %R.H.

Pressure: (96 ±10) kPa

8. Test Results :

Clause 3.3,4.3,5.3. Refer to the test results

9. Location of Test :

☒ Permanent Testing Lab ☐ On Site Testing
(5 Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si,
Gyeonggi-do, Republic of Korea)

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.
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Affirmation	Tested by	Technical Manager	
	HyungUk Jeon	(Signature)	HoHyun Lee (Signature)

The above testing certificate is the accredited test result by Korea Laboratory Accreditation Scheme, which signed the ILAC-MRA.



Jun 11, 2024

Accredited by KOLAS, Republic of KOREA **CTK Co., Ltd.**



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1. Testing Laboratory

1.1 Testing laboratory information

Lab. Name	CTK Co., Ltd.
Address	5 Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Republic of Korea
Tel.	+82-31-339-9970
Fax.	+82-31-624-9501
E-Mail	ctk@e-ctk.com
Website	e-ctk.com

1.2 Testing laboratory accreditation status

Country	Classification	Accreditation Number	Logo
International	KOLAS	TESTING NO. KT119	

2. Product description and Equipment information

2.1 Product description

Test product	Model Name	Quantity	Serial Number
NETWORK CAMERA	QNO-7082R,	1 EA	

2.2 Equipment information

Testing equipment	Model Name	Manufacturer	Manufacturing Number	Calibration Date
Temperature & Humidity Chamber	ARS-0680	ESPEC	4100200121	2025.04.05
Temperature & Humidity Chamber	C4-340	Weissstechnik	54260023190010	2025.04.05

2.3 Testing equipment photos



Temperature & Humidity Chamber



Temperature & Humidity Chamber

2.4 Pre-test product photos



Front



Rear



Left side



Right side



Top



Bottom

3. Dry heat Test (IEC 60068-2-2:2007)

3.1 Test duration, Environmental conditions, and Location

3.1.1 Test Date : May 14. 2024 ~ May 14 2024

3.1.2 Measured Environmental Conditions

Item	Temperature (℃)	Humidity (% R.H.)	Pressure (kPa)
Measurement	27.5	30.1	97.6

3.2 Test conditions

3.2.1 Test Time : 16 h

3.2.2 Test Temperature : 60 ℃

3.2.3 Test Method and Acceptance Criteria : Check the normal operation and product appearance after the test.

3.3 Test result

Evaluation Criteria	Test Results	Remark
operation	Normal	-
external appearance	Normal	-

4. Cold test (IEC 60068-2-1:2007)

4.1 Test duration, Environmental conditions, and Location

4.1.1 Test Date : May 16. 2024 ~ May 17 2024

4.1.2 Measured Environmental Conditions

Item	Temperature (℃)	Humidity (% R.H.)	Pressure (kPa)
Measurement	25.6	31.7	96.5

4.2 Test conditions

4.2.1 Test Time : 16 h

4.2.2 Test Temperature : - 33 ℃

4.2.3 Test Method and Acceptance Criteria : Check the normal operation and product appearance after the test.

4.3 Test result

Evaluation Criteria	Test Results	Remark
operation	Normal	-
external appearance	Normal	-

5. Damp heat, cyclic Test (IEC 60068-2-30:2005)

5.1 Test duration, Environmental conditions, and Location

5.1.1 Test Date : May 17. 2024 ~ May 19 2024

5.1.2 Measured Environmental Conditions

Item	Temperature (℃)	Humidity (% R.H.)	Pressure (kPa)
Measurement	26.6	30.7	97.4

5.2 Test conditions

5.2.1 Test Time : 48 h

5.2.2 Test Temperature : 55 ℃, 25 ℃

5.2.3 Test Humidity : 95 %, 75 %

5.2.4 Cycle : 2 Cycles

5.2.5 Test Method and Acceptance Criteria : Check the normal operation and product appearance after the test.

5.3 Test result

Evaluation Criteria	Test Results	Remark
operation	Normal	-
external appearance	Normal	-

6. Photos of testing

6.1 Test Environment Set-up Photos

[Dry heat test]



[Cold test , Damp heat, cyclic test]



6.2 Operation Check

[Dry hear Operation check after test]



[Cold Operation check after test]

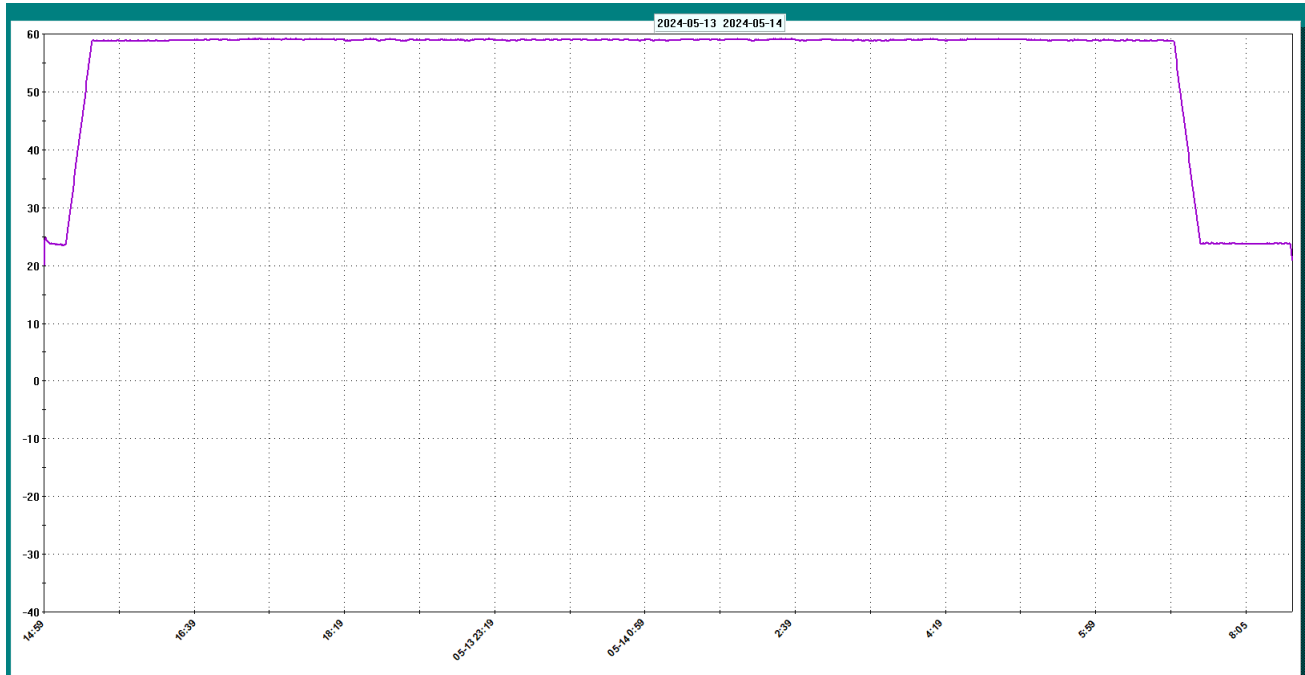


[Damp heat, cyclic test Operation check after test]

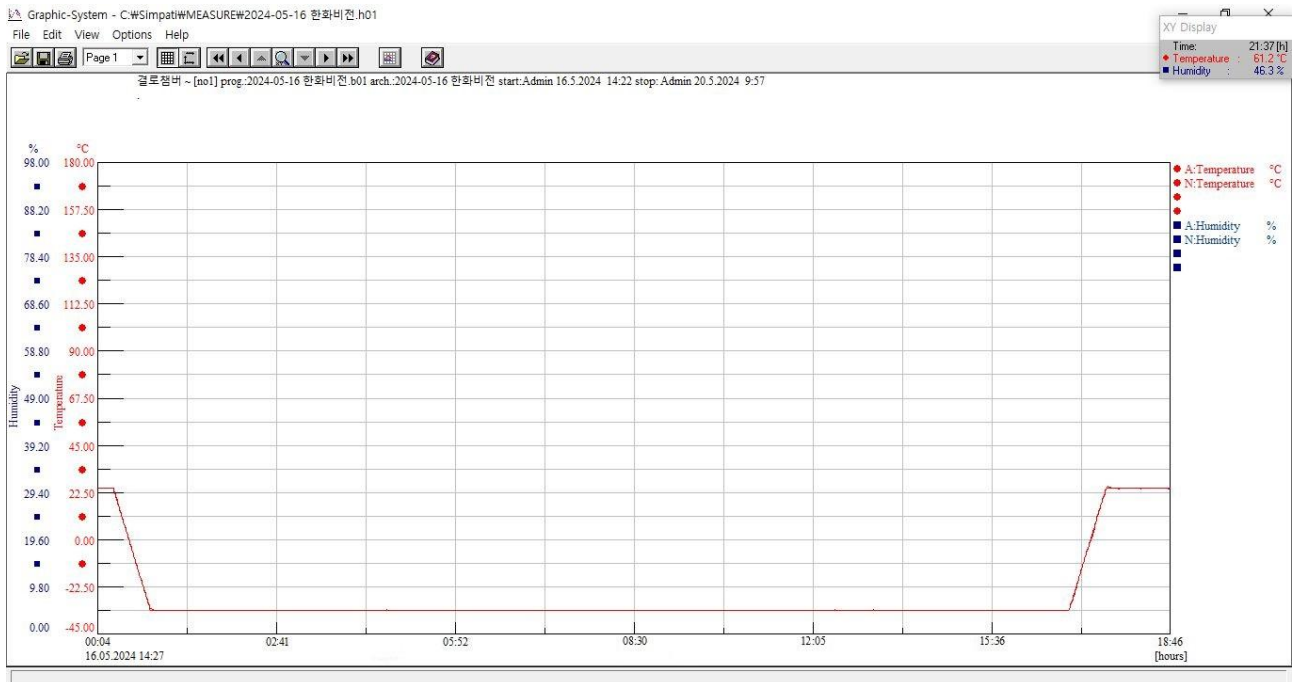


6.3 Temperature Graph

[Dry hear test]



[Cold test]



[Damp heat, cyclic test]



- End -