

TEST REPORT



CTK Co., Ltd.

(Ho-dong), 113, Yejjik-ro, Cheoin-gu, Yongin-si,
Gyeonggi-do, 449-100, Korea
Tel: +82-31-339-9970
Fax: +82-31-624-9501

REPORT No.:

CTK-2025-00793

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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 : Nov. 08, 2024

2. Manufacturer

- Name : Hanwha Vision Co., Ltd

3. Use of Report :

For submission to customer

4. Test sample / Model :

NETWORK THERMAL CAMERA / TNM-C2722TDR

5. Date(s) of test :

Dec. 24, 2024

6. Test Standard (Method) used :

KS C IEC 62262: 2005

7. Testing Environment :

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

Pressure: (96 ±10) kPa

8. Test Results :



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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Approval	Tested by		Technical Manager	
	Name: HyungUK Jeon	(Signature) 	Name: HoHyun Lee	(Signature) 

Remark. This report is not related to KOLAS accreditation and relevant regulation.

Dec. 27, 2024

CTK Co., Ltd.



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1. Testing laboratory

1.1 Testing laboratory information

Lab. Name	CTK Co., Ltd.
CEO	Joseph Young
Address	113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do Republic of Korea
Tel.	+82-31-339-9970
Fax.	+82-31-624-9501
E-Mail	all.youngin@element.com
Website	www.elemntkorea.kr

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

Product Name	Model Name	Quantity	Comment
NETWORK THERMAL CAMERA	TNM-C2722TDR	-	-

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2.2 Model description

Basic Model	TNM-C2722TDR
Series model	TNM-C2712TDR
Model differences	Use of the same external shape and materials (case, finishing material, PCB, cable, etc.), differences in fixed lens inside the product.

2.3 Equipment information

Testing equipment	Model Name	Manufacturer	Manufacturing Number	Calibration Date
Vertical Hammer Tester	Vertical Hammer	Kingpo	0190605A01002	
Vertical Hammer	5000g	Kingpo	TX-029-10J	
Steel measuring meter	5.5 m	KOMELON	225851	2025.03.27



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2.4 Pre-test product images

2.4.1 Test sample #1



Top



Bottom



Front



Rear



Left side



Right side



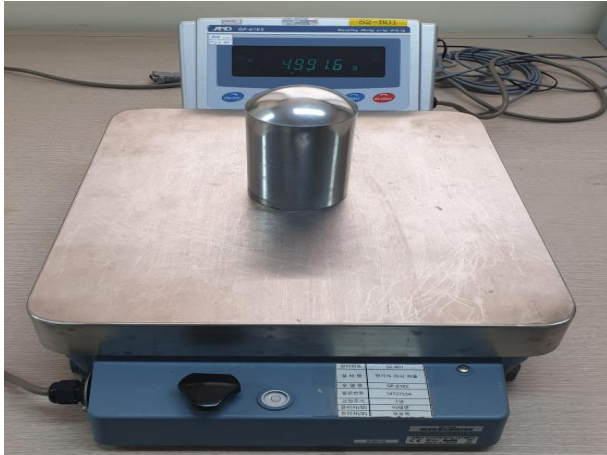
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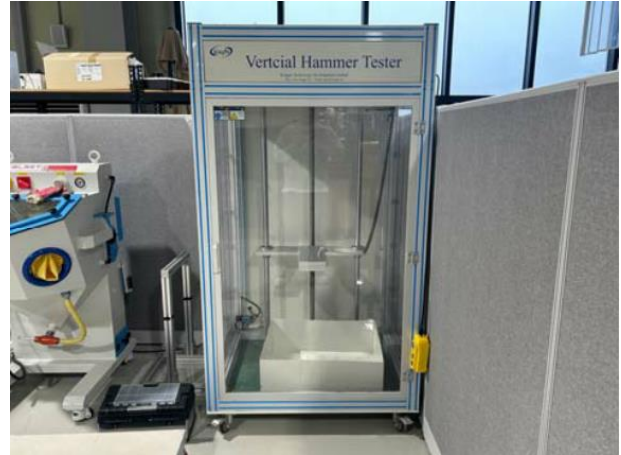
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2.5 Testing equipment images

2.5.1 Test equipment



Vertical Hammer



Vertical Hammer Tester



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3. Test conditions and methods

3.1 Test date and environmental conditions

3.1.1 Test date: Dec. 24, 2024

3.1.2 Measured Environmental Conditions

Item	Temperature (°C)	Humidity (% R.H.)	Pressure (kPa)
Measurement	27.6	67.4	89.1

3.2 Test conditions and methods

IK code	Impact Energy (J)	Equivalent mass (kg)	Drop height (mm ± 1%)	Application
00	Non-protected	-	-	<input type="checkbox"/>
01	0.14	0.25	56	<input type="checkbox"/>
02	0.20	0.25	80	<input type="checkbox"/>
03	0.35	0.25	140	<input type="checkbox"/>
04	0.50	0.25	200	<input type="checkbox"/>
05	0.70	0.25	280	<input type="checkbox"/>
06	1.00	0.25	400	<input type="checkbox"/>
07	2.00	0.50	400	<input type="checkbox"/>
08	5.00	1.70	300	<input type="checkbox"/>
09	10.00	5.00	200	<input checked="" type="checkbox"/>
10	20.00	5.00	400	<input type="checkbox"/>
- Impact times: five times for each of the exposed surface. (Do not impact more than 3 times in the same spot)				



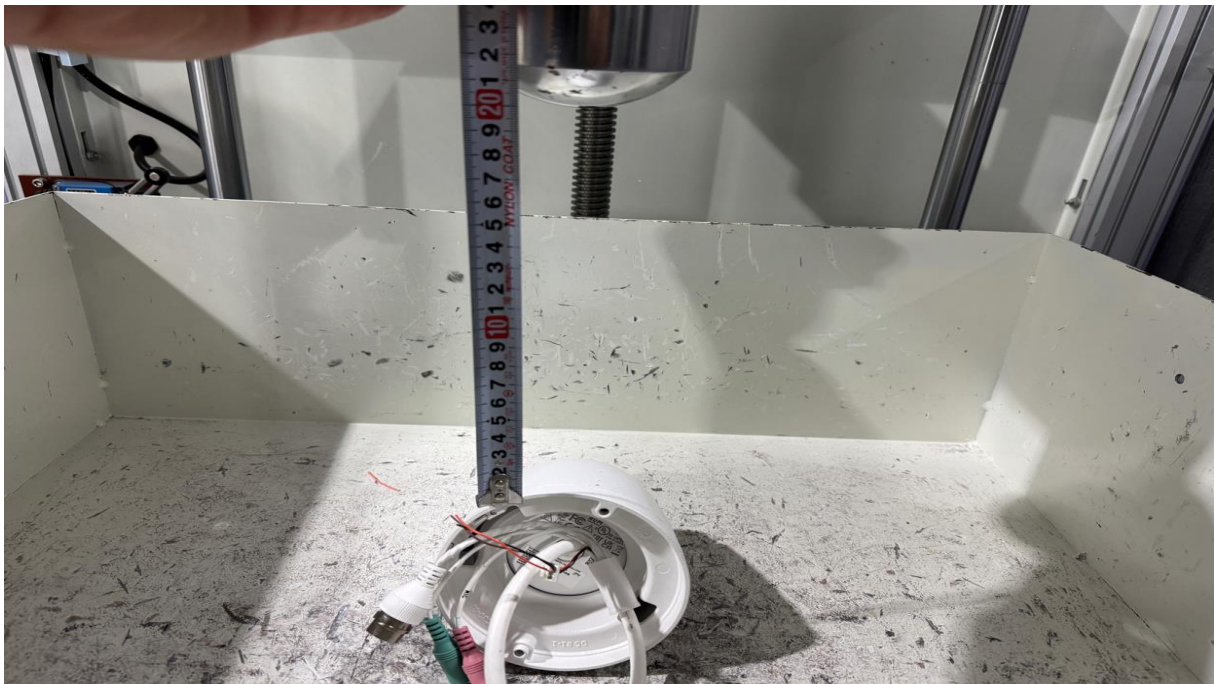
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3.3 Testing images

3.3.1 Evidence of test setting



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4. Test result

4.1 Test result table

Evaluation Criteria		시험 결과	비고
Visual Inspection	Pre-test	No problem with the product	Except for the front lens part of the impact area
	Post-test	Some scratches were generated on the outside of the product.	

※ Refer to the sample images after the test is completed. (Clause 4.3)



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4.2 Hit area images

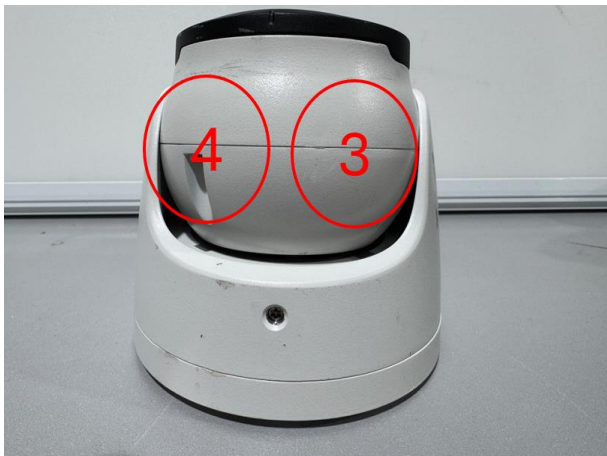
4.2.1 Check the hit area during the test (1)



Check the hit area the test_1



Check the hit area the test_2



Check the hit area the test_3



Check the hit area the test_4



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4.2.2 Check the hit area during the test (2)



Check the hit area the test_1



Check the hit area the test_2



Check the hit area the test_3



Check the hit area the test_4



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4.3 Post-test product images

4.3.1 Post-test product image



Top



Bottom



Front



Rear



Left side



Right side



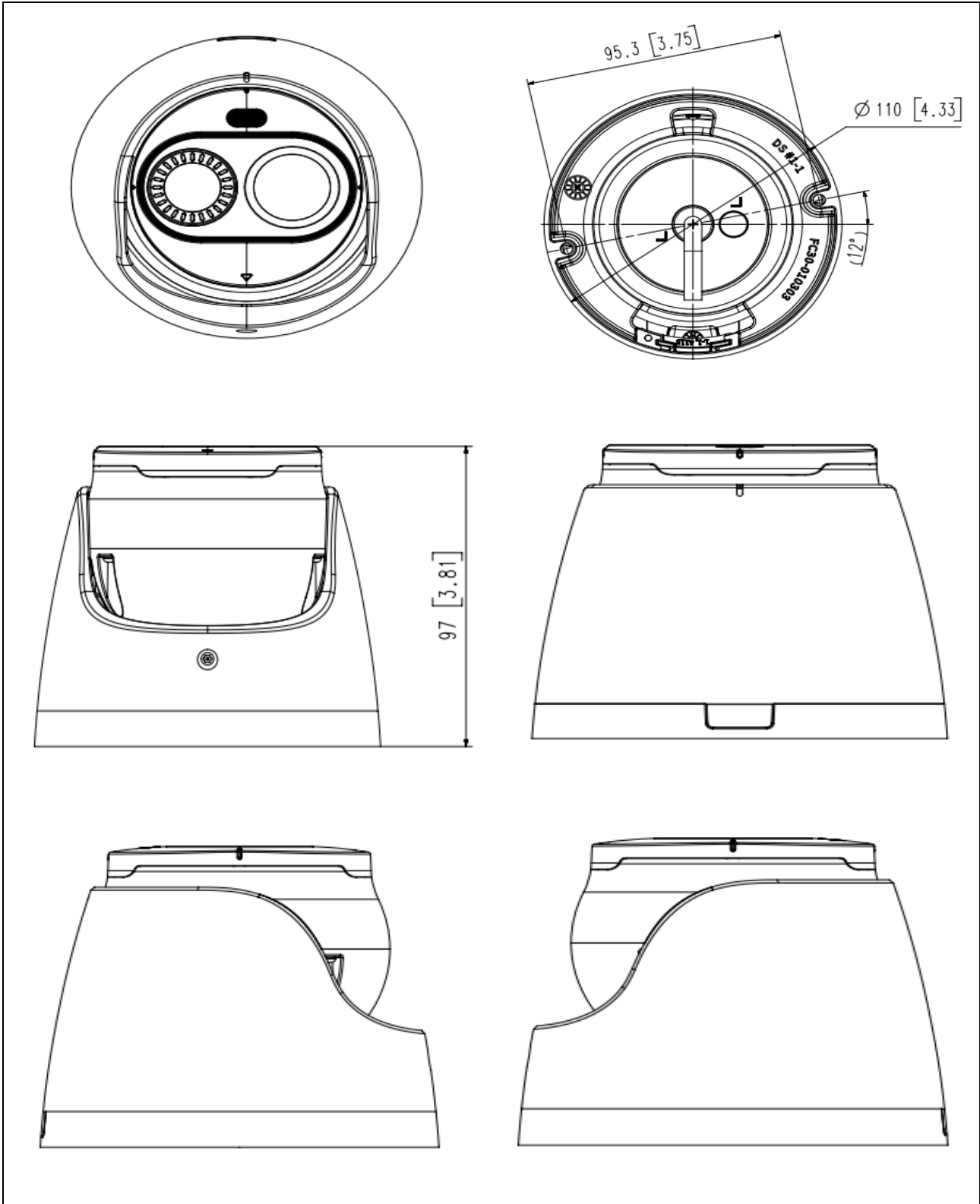
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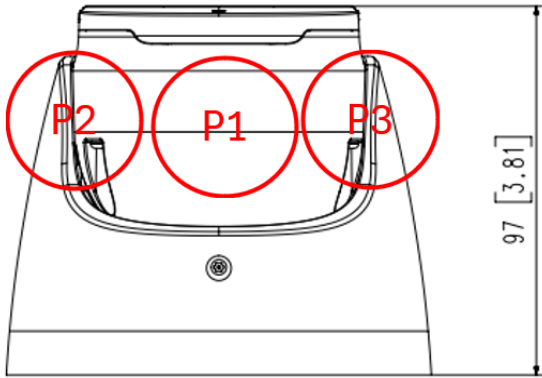
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4.4 Enclosure Dimensions or impact point (Unit: mm)

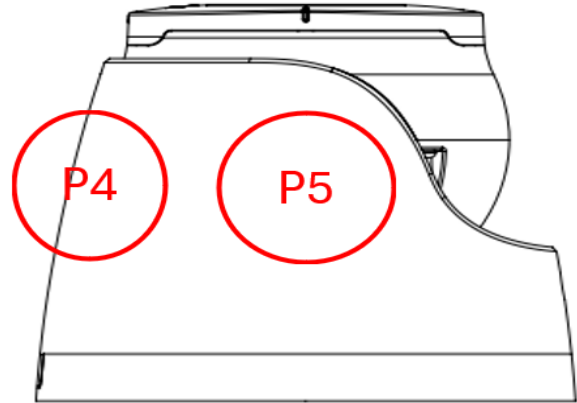
4.4.1 Enclosure Dimensions



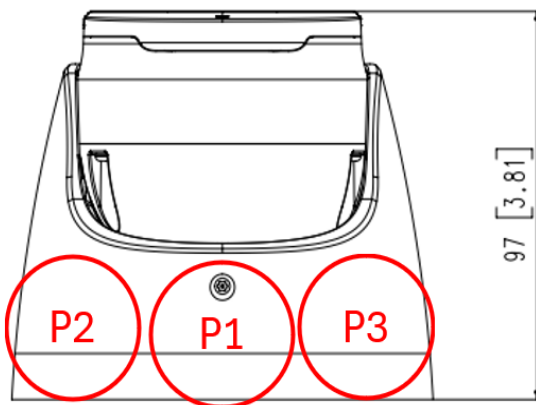
4.4.2 Impact point



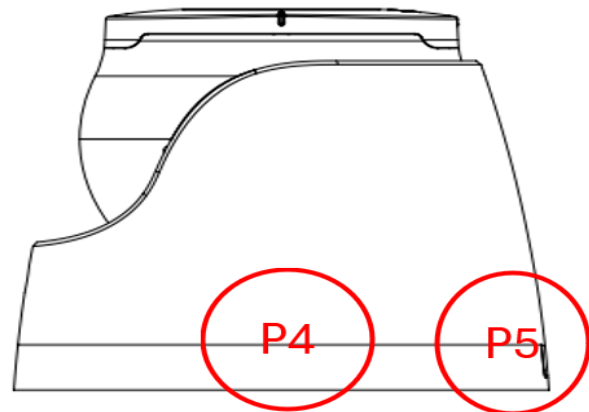
Impact point image_1



Impact point image_2



Impact point image_3



Impact point image_4

- End -