

TEST REPORT

 CTK Co., Ltd. <small>The Power Leader of Global Republics Certification</small>	CTK Co., Ltd. 5 Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Republic of Korea Tel: +82-31-339-9970 Fax: +82-31-624-9501	REPORT No.: CTK-2024-02126 Page (1) / (14) pages	
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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 : JUL 09, 2024
2. Manufacturer	◦ Name : Hanwha Vision Co., Ltd
3. Use of Report :	For customer submission
4. Test sample / Model :	NETWORK CAMERA / QNO-C8023R
5. Date(s) of test :	JUL 12, 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 :	Clause 4. Refer to the test results
9. Location of Test :	<input checked="" type="checkbox"/> Permanent Testing Lab <input type="checkbox"/> 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. This report cannot be reproduced or copied without the written consent of CTK

Approval	Tested by Name: KyuNam Park  (Signature)	Technical Manager Name: HoHyun Lee  (Signature)
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Remark. This report is not related to KOLAS accreditation and relevant regulation.

JUL 29, 2024

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	

 CTK Co., Ltd. <small>The Prime Leader of Global Republics Certification</small>	CTK Co., Ltd. 5 Dongbu-ro 221beon-gil, Cheoin-gu, Yongin-si, Gyeonggi-do, Republic of Korea Tel: +82-31-339-9970 Fax: +82-31-624-9501	REPORT No.: CTK-2024-02126 Page (4) / (14) pages	
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2. Product description and equipment information

2.1. Product description

Product Name	Model Name	Quantity	Comment
NETWORK CAMERA	QNO-C8023R	1 EA	-

2.2. Testing equipment information

Testing equipment	Model Name	Manufacturer	Manufacturing Number	Calibration Date
Vertical Hammer Tester	Vertical Hammer	Kingpo	0190605A01002	
Vertical Hammer	20J	Kingpo	TX028-3	
Steel measuring meter	5.5 m	KOMELON	225851	2025.03.27

2.3. Product Photographs



Top



Bottom



Front



Rear



Left side



Right side

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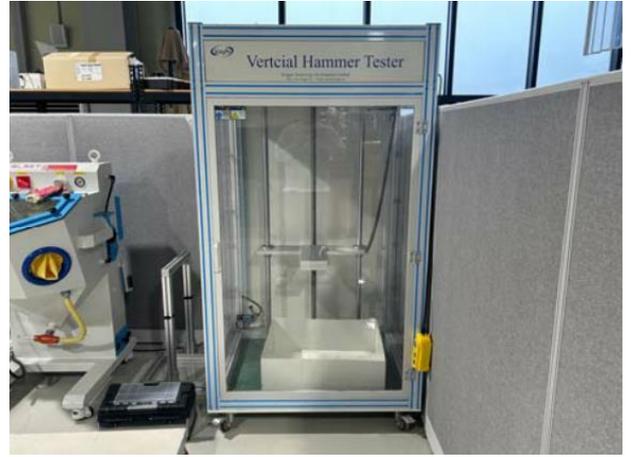
2.4. Model description

Basic Model	QNO-C8023R
Series model	QNO-C8013R
Model differences	differences in Fixed Lens inside the basic model.

2.5. Testing equipment images



Vertical Hammer



Vertical Hammer Tester



Steel measuring meter

3. Test conditions and methods

3.1. Test duration, Environmental conditions, and Location

3.1.1. Test date : JUL 12, 2024

3.1.2. Measured environmental conditions

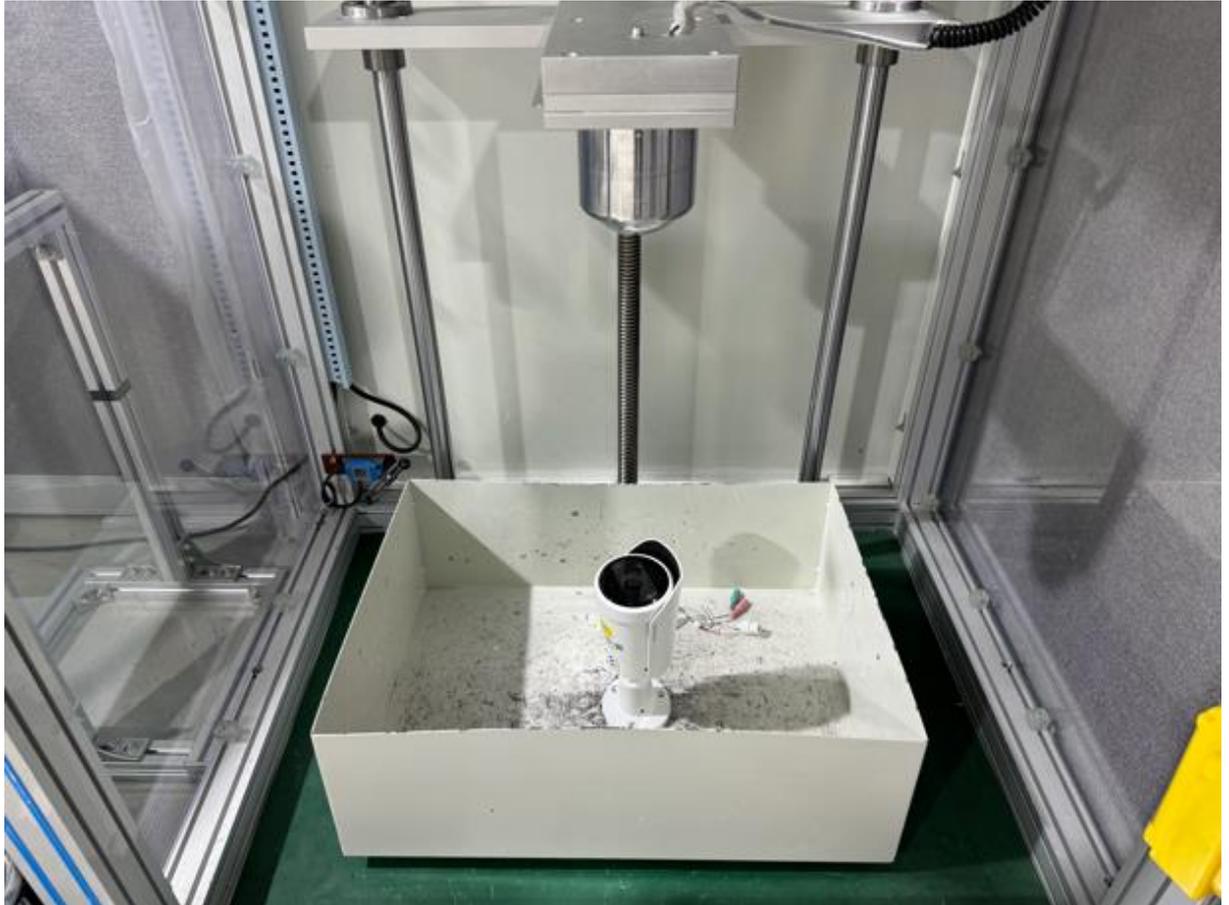
Item	Temperature (°C)	Humidity (% R.H.)	Pressure (kPa)
Measurement	25.2	71.6	99.3

3.2. Test condition

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 type="checkbox"/>
10	20.00	5.00	400	<input checked="" type="checkbox"/>
- Impact times: five times for each of the exposed surface. (Do not impact more than 3 times in the same spot)				

3.3. Testing images

3.3.1. Test environment setup image



Test environment setup image_1

4. Test result

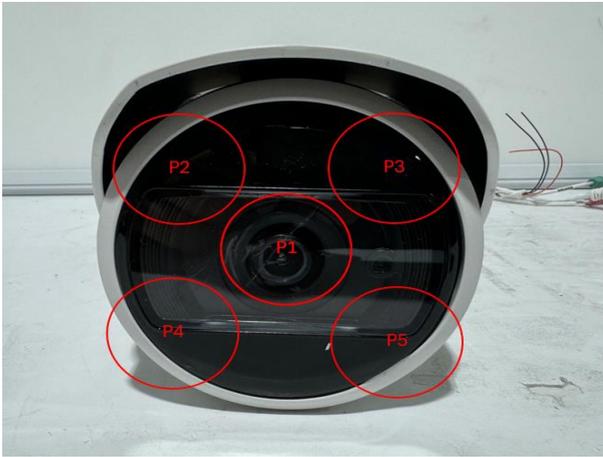
4.1. Test result table

Evaluation Criteria		Test Results
Visual Inspection	Pre-test	No problem with the product
	Post-test	Some scratches were generated on the outside of the product.

※ Refer to the sample images after the test is completed. (Clause 4.2, 4.3)

4.2. Post-test product images and hit area images

4.2.1 Check the hit area during the test



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



Check the hit area the test_5

4.2.2 Post-test product images



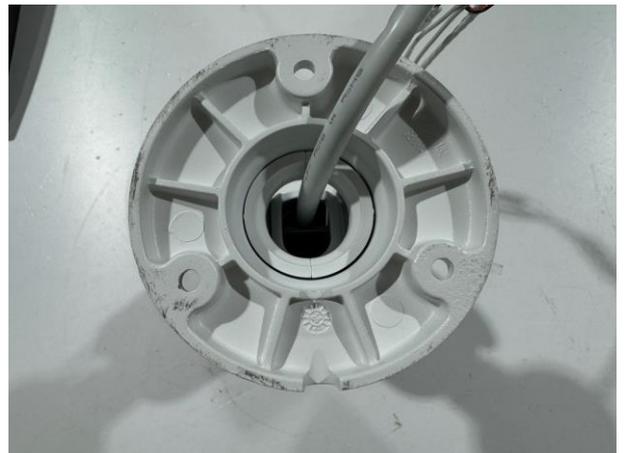
Top



Bottom



Front



Back



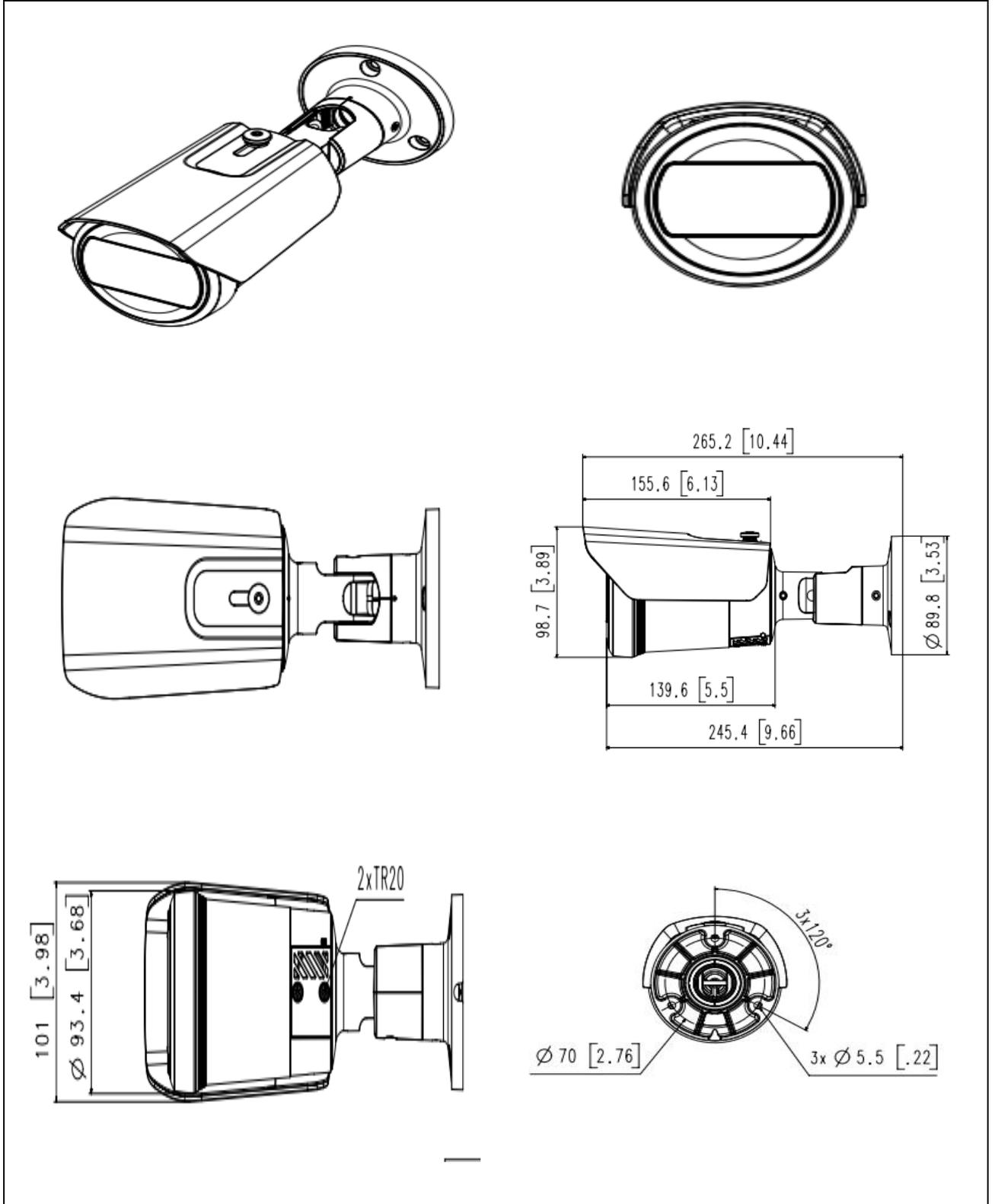
Left side



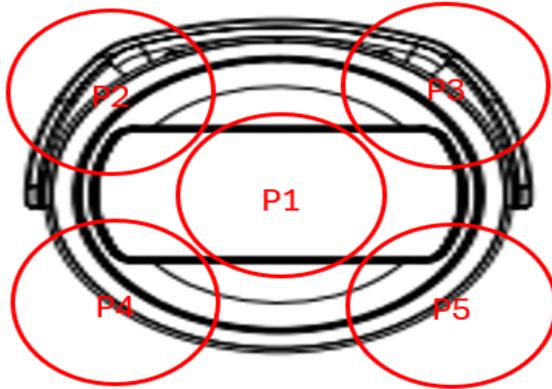
Right side

4.3. Enclosure Dimensions or Impact point (Unit: mm)

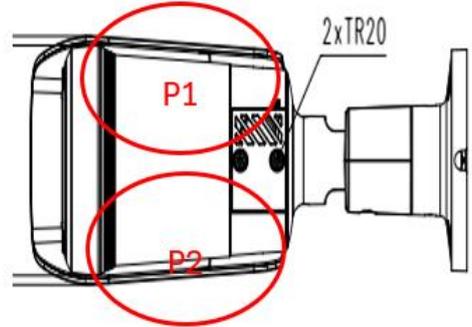
4.3.1 Enclosure Dimensions



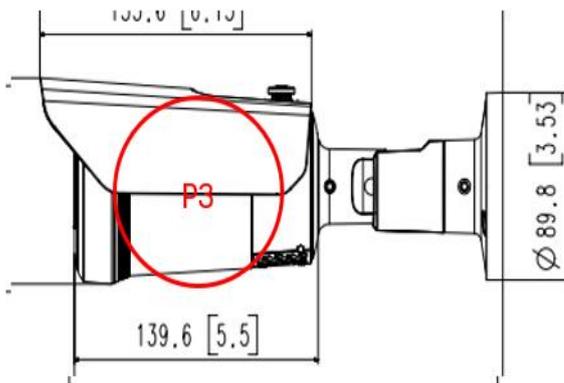
4.3.2 Impact point



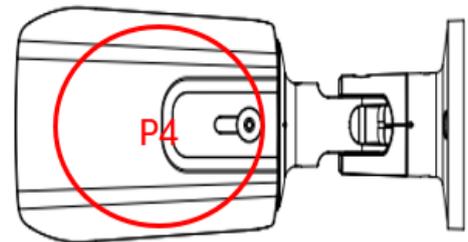
Impact point image 1



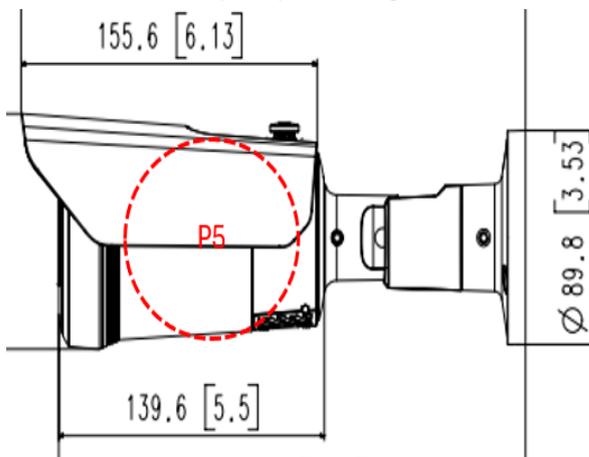
Impact point image 2



Impact point image 3



Impact point image 4



Impact point image 5

-End-