

# TEST REPORT

**KCTL Inc.**

52-20, Sinjeong-ro 41 beon-gil, Giheung-gu,  
Yongin-si, Gyeonggi-do 446-599, Korea  
Tel : 82-31-326-6700 Fax : 82-505-299-8311  
[www.kctl.co.kr](http://www.kctl.co.kr)

Report No.:  
KR16-YYP0228

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**KCTL****1. Client**

- Name : Hanwha Techwin Co., Ltd
- Address : 1204, Changwon-daero, Seongsan-gu, Changwon-si,  
Gyeongsangnam-do, Korea
- Date of Receipt : 2016-12-27

**2. Use of Report** : For Quality evaluation

**3. Name of Product and Model** : CCTV Camera /  
HCM-9020VQ\* (\* N: NTSC / P: PAL)

**4. Manufacturer and Country of Origin** : CPRO ELECTRONICE CO., Ltd. / Korea

**5. Date of Test** : 2016-12-28

**6. Test method used** : IEC 62262: 2002 (IK 10)

**7. Test Results** : Refer to the test result in the test report

Affirmation	Tested by	Technical Manager
	Name: Kyung Hoon, Ahn (Signature)	Name : Do Hong, Choi (Signature)

2016-12-28

**KCTL Inc.**

As a test result of the sample which was submitted from the client, this report does not guarantee the whole product quality. This test report should not be used and copied without a written agreement by KCTL Inc.


## REPORT REVISION HISTORY

Date	Revision	Page No
2016-12-28	Originally issued	-

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## 1. Test Laboratory

### 1.1 General

Name of Test Laboratory	KCTL INC.
Address	52-20, Sinjeong-ro 41 beon-gil, Giheung-gu, Yongin-si, Gyeonggi-do 446-599, Korea
TEL	82 31-326-6700
FAX	82 505-299-8311
Home page	<a href="http://www.kctl.co.kr">www.kctl.co.kr</a>

### 1.2 Certificate of Designated Testing Laboratory

Mark.	Registration No.
NRRA	KR0040
KOLAS	No. KT231
IEC(CB-Scheme)	TL512
TUV-SUD	CARAT 15 08 93040 001
VCCI Council	R-3327, C-3706, T-1849, G-198
DSP Research, Inc.	G039
FCC	Test Firm Registration No. 687132
INDUSTRY CANADA	Company Address Code: 8035A

## 2. Specification

### 2.1 Specification

Division	Specification
Product Name	CCTV Camera
Model Name	HCM-9020VQ * ( * N:NTSC / P:PAL)

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## 2.2 Product Photograph



[Front]



[Rear]

### 3. Test Method and Result

#### 3.1 IK10 Impacts Test

##### 3.1.1 Test Equipment

Instrument description	Model	Manufacturer	Serial number	Due Cal
20J IMPACT ELEMENT	None	CERTIS	None	-
Pendulum Hammer	20 J	None	None	2021-07-01
Measuring Tape	3.5 m	Komelon	None	2018-07-07
Weighting Scale	DB-60H	CAS	IY1142	2017-02-28

##### 3.1.2 Date of test / Environment of test:

- 1) 2016.12.28
- 2) Temperature ( $22 \pm 2$ ) °C, Relative Humidity ( $33 \pm 2$ ) % R.H,  
Air pressure ( $101 \pm 2$ ) kPa

##### 3.1.3 Test Conditions

- 1) Test method used: IEC 62262: 2002 (IK 10)
- 2) Energy: 20 J
- 3) Mass: 5.0 kg
- 4) Heigh: 400 mm
- 5) Pretreatment: None
- 6) Location and number of impact: Window 5 impact, Enclosure 5 impacts



### 3.1.4 Test Criteria

- 1) Visual inspection after impact test (Damage, crack, separation occur)
- 2) Protected against access to hazardous parts

### 3.1.5 Test Results

Check List	Test Result
<ol style="list-style-type: none"> <li>1. Window part <ul style="list-style-type: none"> <li>- Visual inspection after impact test (Damage, crack, separation occur)</li> <li>- Protected against access to hazardous parts</li> </ul> </li> <li>2. Enclosure part <ul style="list-style-type: none"> <li>- Visual inspection after impact test (Damage, crack, separation occur)</li> <li>- Protected against access to hazardous parts</li> </ul> </li> </ol>	<p align="center">No abnormal was found (Refer to 3.1.7)</p>

※ Allow extent of damage: Scratch



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### 3.1.6 TEST Photograph



[During the test\_Window]



[During the test\_Enclosure]



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### 3.1.7 Test Result Photograph



[Test result confirme\_Window]



[Test result confirme\_Enclosure 01]

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[Test result confirme\_ Enclosure 02]



[Test result confirme\_ Enclosure 03]