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Date: March 13, 2020

VECOW CO., LTD 3F., NO.10, JIANKANG RD., ZHONGHE DIST., NEW TAIPEI CITY, TAIWAN, R.O.C.

The following merchandise was submitted and identified by the vendor as:

Product Description: **RES-3000** 

RES-3000-8665U/No.1 Style/ Item No.:

Quantity: Total 1 set

**Testing Period:** Mar. 9, 2020 to Mar. 12, 2020

We have tested the submitted sample(s) as requested and the following results were obtained:

Test Required: (According to client's test specification, please see following sheets in detail.)

1. Low Temperature Test

2. High Temperature Test

3. Random Vibration Test

4. Mechanical Shock Test

Test Results: -PLEASE SEE ATTACHED SHEETS-

> Signed for and on behalf of SGS TAIWAN Ltd.

Allen Wang Asst. Supervisor

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### 1. Low Temperature Test:

# Test Equipment:

| Name  | Brand | Model              | Serial No.    |
|---|-------|--------------------|---------------|
| Programmable Temperature and Humidity Chamber | KSON  | GTH-1000-60-CP-AR- | H MAA1810-001 |

#### Lab Environmental Conditions:

(25 ± 3) °C Ambient temperature:

Ambient humidity:  $(55 \pm 20) \% RH$ 

Test Location: No. 31, Wu Chyuan Road, New Taipei Industrial Park, WuKu District,

New Taipei City, Taiwan

#### Test Method/ Specification:

Sample condition: Operating (execute "Burnln Test V8.1 Pro")

Test Temperature: -30 °C Duration: 16 hours

Examine the appearance of specimen(s) by visual check and perform functional check after this test.

Functional check: Turn on the power of specimen then examine the test program "Burnln Test V8.1 Pro" could work normally or not.

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Specimen:

Style/Item No.: RES-3000-8665U/No.1

Quantity: Total 1 set

### Test Result:

| Check Item Style/ Item No. | Appearance check<br>(Visual check) | Functional check |
|----------------------------|------------------------------------|------------------|
| RES-3000-8665U/ No.1       | No visible damage                  | Normal           |



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### 2. High Temperature Test:

### Test Equipment:

| Name  | Brand | Model              | Serial No.    |
|---|-------|--------------------|---------------|
| Programmable Temperature and Humidity Chamber | KSON  | GTH-1000-60-CP-AR- | H MAA1810-001 |

#### Lab Environmental Conditions:

(25 ± <u>3)</u> ℃ Ambient temperature:

Ambient humidity:  $(55 \pm 20) \% RH$ 

Test Location: No. 31, Wu Chyuan Road, New Taipei Industrial Park, WuKu District,

New Taipei City, Taiwan

#### Test Method/ Specification:

Operating (execute "Burnln Test V8.1 Pro") Sample condition:

Test Temperature: 70 °C Test Humidity: 95 % RH

Duration: 16 hours

Examine the appearance of specimen(s) by visual check and perform functional check after this test.

Functional check: Turn on the power of specimen then examine the test program"Burnln Test V8.1 Pro" could work normally or not.

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Specimen:

Style/Item No.: RES-3000-8665U/No.1

Quantity: Total 1 set

#### Test Result:

| Check Item Style/ Item No. | Appearance check<br>(Visual check) | Functional check |
|----------------------------|------------------------------------|------------------|
| RES-3000-8665U/ No.1       | No visible damage                  | Normal           |



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### 3. Random Vibration Test:

### Test Equipment:

| Name                  | Brand            | Model            | Serial No.  |
|-----------------------|------------------|------------------|-------------|
| Vibration Test System | King Design      | EM-800F2K-50N120 | RU104080389 |
| Controller            | Dactron          | COMET 200        | 10539718    |
| Control Accelerometer | Wilcoxn Research | 793-6            | A4938       |

#### Lab Environmental Conditions:

Ambient temperature: (25 ± 3) °C

Ambient humidity:  $(55 \pm 20) \% RH$ 

No.17, Wu Chyuan 8th Road, New Taipei Industrial Park, WuKu District, Test Location:

New Taipei City, Taiwan.

#### Test Method/ Specification:

Direction:

Sample condition: Operating (execute "Burnln Test V8.1 Pro")

Wave form: Random

Frequency:  $(5 \sim 500) \text{ Hz}$ 

| Frequency (Hz) | Left Slope<br>(dB/ Oct.) | PSD<br>(g <sup>2</sup> /Hz) | Right Slope<br>(dB/ Oct.) |
|----------------|--------------------------|-----------------------------|---------------------------|
| 5              | _                        | 0.05                        | 0                         |
| 500            | 0                        | 0.05                        | -                         |
| => equivalen   | t to 5.0 Grms            |                             |                           |

 $X, Y, Z \text{ axes (see photo } 5 \sim 7)$ 

**Duration:** 30 minutes/axis

Examine the appearance of specimen(s) by visual check and perform functional check after this test.

Functional check: Turn on the power of specimen then examine the test program"Burnln Test V8.1 Pro" could work normally or not.

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SGS Taiwan Ltd



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Specimen:

Style/Item No.: RES-3000-8665U/No.1

Quantity: Total 1 set

### Test Result:

| Check Item  Style/ Item No. | Appearance check<br>(Visual check) | Functional check |
|-----------------------------|------------------------------------|------------------|
| RES-3000-8665U/ No.1        | No visible damage                  | Normal           |



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### 4. Mechanical Shock Test:

#### Test Equipment:

| * *                                |          |                        |            |
|------------------------------------|----------|------------------------|------------|
| Name                               | Brand    | Model                  | Serial No. |
| Shock Test System                  | LANSMONT | 95-115D                | M17656     |
| Data Acquisition & Analysis System | LANSMONT | TP4 8A-CH SML 1115-001 | 1115-001   |
| ICP Accelerometer                  | PCB      | 353M288                | 196438     |
| ICP Accelerometer                  | PCB      | 356A24                 | 90696      |
| ICP Accelerometer                  | PCB      | 356A24                 | 162319     |
| Shock Test System                  | LANSMONT | 95-115D                | M17656     |

#### Lab Environmental Conditions:

(25 ± 3) °C Ambient temperature: Ambient humidity:  $(55 \pm 20) \% RH$ 

Test Location: No. 33, Wu Chyuan Road, New Taipei Industrial Park, WuKu District,

New Taipei City, Taiwan

### Test Method/ Specification:

Operating (execute "Burnln Test V8.1 Pro") Sample condition:

Pulse shape: Half-Sine

Acceleration: 50 g Pulse duration: 11 ms

Shock direction: 6 faces ( $\pm X$ ,  $\pm Y$ ,  $\pm Z$  axes, see photo  $8 \sim 13$ )

No. of shock: 3 shocks/axis (total 18 shocks)

Examine the appearance of specimen(s) by visual check and perform functional check after this test.

Functional check: Turn on the power of specimen then examine the test program"Burnln Test V8.1 Pro" could work normally or not.

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Specimen:

Style/Item No.: RES-3000-8665U/No.1

Quantity: Total 1 set

### Test Result:

| Check Item Style/ Item No. | Appearance check<br>(Visual check) | Functional check |
|----------------------------|------------------------------------|------------------|
| RES-3000-8665U/ No.1       | No visible damage                  | Normal           |



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**Test Photos:** 





1. Appearance of specimen

Appearance of specimen





3. Low Temperature Test/ **High Temperature Test** 

4. Low Temperature Test/ **High Temperature Test** 





Random Vibration Test: X axis

Random Vibration Test: Y axis



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Test Photos--Continued:



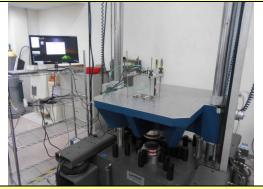
Random Vibration Test: Z axis



Mechanical Shock Test: +X axis



Mechanical Shock Test: -X axis



10. Mechanical Shock Test: +Y axis



11. Mechanical Shock Test: -Y axis



12. Mechanical Shock Test: +Z axis

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Test Photos--Continued:



13. Mechanical Shock Test: -Z axis

14. Functional check

The End of Test Report

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