

# Thermal Resistance Test Report

Date:2020/10/19

Engineer: Ken



Part Number:

**RG4124-33**

Description:

**1.5U CPU COOLER 94X56**

**FOR INTEL SOCKET LGA115X**

**1200 PROCESSORS**

## Test Condition

| Heat Flux    | Pressure        | Test Duration | Ambient Temp | Convection         |
|--------------|-----------------|---------------|--------------|--------------------|
| 95/125 Watts | 40lbf /18.14kgf | 120 minutes   | 45°C         | Natural Convection |

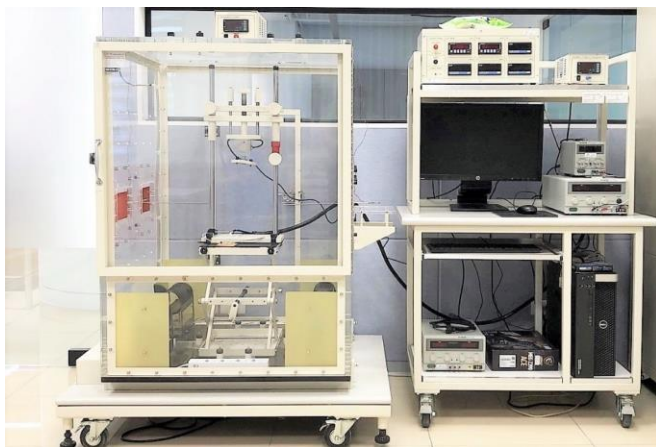
## Test Data

| Sample | T <sub>c</sub> (°C) | T <sub>a</sub> (°C) | Fan Speed (RPM) | F (kgf) | Q (W)  | R (°C/W) |
|--------|---------------------|---------------------|-----------------|---------|--------|----------|
| 1      | 77.82               | 45.40               | 4559            | 18.71   | 94.90  | 0.34     |
| 2      | 89.60               | 48.10               | 4310            | 18.75   | 124.89 | 0.33     |

## Test Result

| Q (W) | T <sub>c</sub> (°C) | R (°C/W) |
|-------|---------------------|----------|
| 95    | 77.82               | 0.34     |
| 125   | 89.60               | 0.33     |

# Thermal Resistance Test Report



**NATURAL CONVECTION**



**CIRCULATING CONVECTION**

- **CPU Cooler Thermal Resistance Measurement Apparatus with Natural Convection Chamber ,4 sets of 650 watts Infrared Radiation Heaters.**
- **Operating Temperature : Room Temperature ~ 70°C**
- **CPU Cooler Thermal Resistance Measurement Apparatus with Programmable temperature and humidity chamber, Through a mechanical circulation system, using fans and heating coils.**
- **Operating Temperature : -40°C ~ 150°C**

# Compression Force Test Report



Part Number:

**RG4124-33-002**

Description:

**1.5U CPU COOLER 94X56 FOR INTEL SOCKET**

**LGA115X 1200 PROCESSORS**

Date:2022/11/07

Engineer: Vic

Test Criterion

| Total Force of CPU Cooler |           |           |
|---------------------------|-----------|-----------|
| Typical                   | Maximum   | Minimum   |
| 33.56 lbf                 | 36.92 lbf | 30.21 lbf |

Test Condition

| PCB Thickness | CPU Height (about PCB) |
|---------------|------------------------|
| 1.6mm         | 7.71mm                 |

Test Data

| Sample | Compression Force |
|--------|-------------------|
| 1      | 34.2 lbf          |
| 2      | 34.4 lbf          |
| 3      | 34.1 lbf          |
| AVG    | 34.24 lbf         |

Test Result

|      |                                             |
|------|---------------------------------------------|
| Pass | Compression Force of CPU Cooler = 34.24 lbf |
|------|---------------------------------------------|

# Compression Force Test Report



- The universal clip force measuring device is a tool for measuring the clip holding force for the clip on the CPU Cooler.
- Measuring pressure range 0~220lbf,: accuracy 0.1%FS