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Reliability Test Report

Summary of reliability Test

1. **Date : 2021.08.02**
2. **Prediction item : RS-S60**
3. **Quantity : 10**
4. **Results**

Model	MTBF
RS-S60	53,978 hours

References : MIL-STD-781. Department of Defense, 21 October 1977.

5. **Test : demonstrate MTBF ≥ 40,000 hours**

5-1. Test Equipment : Dynamic operation, USB 2.0 up and USB Hub 1 to 10, Signal generator

5.2 Test Location : Reliability Lab.

5.3 Test Date : (when zero failure)

5.4 Sample Size : 10 units

5.5 Test condition : Temperature/Humidity: 60℃ / 90%RH & 60℃

5.6 Check Point : 100hrs. 200hrs. 300hrs. 500hrs.

5.7 Check Item :

The fingerprint sensor module shall meet the Product Spec. after THB/HTO test.

No mal- function, screen quality.

5.8 Test Criteria : Confident Level: 90% ; MTBF > 40,000 hours

6. **Test Result : PASS (no defect@10Pcs)**

MTBF = 53,978 hours > 40,000 hours

Demonstrated MTBF = (sample size) x (# days) x 24 (hours/day) x 37.95 (temp.& humidity accel@60C/90%RH) & 11.71 (temp. accel @60C) / 2.3 (90% confidence level) = (5 x 500 x 37.95 + 5 x 500 x 11.71) / 2.3 = 53,978 hours

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