



MTBF Test Report

Tested Model	MT8071iE
Quantity of Tested Samples	10 units
Test Duration	1000 hours
Test Date	2018.1.26
Test Condition	temperature : 60°C, humidity : 90%
MTBF (Include touch panel)	79000 hours

1. The MTBF formula is :
$$MTBF = \frac{1}{\lambda} = \frac{2 * tp * AF}{X^2(\alpha, \beta)}$$

2. Parameter Description :

λ	Average Failure Rate
tp	Sum of total test time taken by individual unit.
AF	Acceleration Factor
$X^2(\alpha, \beta)$	Chi-Squared Distribution Function

3. Calculated Parameter Value :

Confidence Level	90%
AF	94.37
tp	8774 hours
$X^2(\alpha, \beta)$	21.064

4. Test Result :

$$MTBF = 2 * 8774 * 94.37 / 21.064 \doteq 78618$$

$$\doteq 79000 \text{ hours}$$

Test Dept.	QA Dept.	Test Engineer	Smile	Approved By	Tachi
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