



FT Opto Laboratories

Client

Eflare Corporation Pty Ltd
222 St Kilda Rd
St Kilda Vic
Australia

Test Report No

051124

Date

24 November 2005

Eflare Drop Test: AS2380.1 and AS60079.1

The Eflare is required to withstand physical vibration and impacts expected in normal use. With batteries installed the forces from a high-G shock can be considerable.

To ensure compliance with AS2380.1 and AS60079.1 the Eflare is expected to withstand a drop test as follows:

Conditions

2 x Duracell MN1300 Alkaline Batteries installed

Impact surface - smooth level concrete

Height - 1m

Angle of impact - varying including one on lens

Number of drops - four

Required result

Eflare still functional

Switch operational

Seal not functionally affected

Lens or body not cracked

Only superficial blemishes to plastic body surface and labels

In addition Eflare requires that beam angle is not materially affected (a change of 0.5° is acceptable)

The most severe test is a vertical drop onto the lens, as this causes the greatest force on the internal electronic module. For this reason the Eflare has a means to support the battery so as to distribute the force during an impact and minimise damage to internal electrical contacts.

Note: Severe impacts have been observed to cause damage to the batteries including corruption to the battery structure causing discharge and eventual chemical leakage. As detailed in the operating instructions the batteries should be replaced after such an impact.

Report

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24 November 2005