

Ingress Protection Test Report

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**Pelican Products Inc.
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**Pelican Protector Case Range, 1470 and
1490**

ETS Report No: RETS0261/1/A
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TEST REPORT

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INTRODUCTION

Equipment: Epsilon, Epsilon of Polypropylene Carry Cases, 1430 and 1435

European Standard: EN61534:1991 (degree of protection provided by enclosures)

Assessments and Tests Completed/Reviewed: March 2001 and April 2001

Sample Results

Sample	Quantity	Serial Number	Date Received at Epsilon
Case Type 1430	1	01/5/2001	20 February 2001
Case Type 1435	1	01/5/2001	22 February 2001

TEST REPORT

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Carried out by Epsilon Technical Services Limited on behalf of:

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ETS Project No: ETS0261

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1 INTRODUCTION

Equipment: Range of Waterproof Polypropylene Carry Cases, 1470 and 1490

European Standards: EN60529: 1991 (degrees of protection provided by enclosures)

Assessments and Tests Conducted Between: March 2001 and April 2001

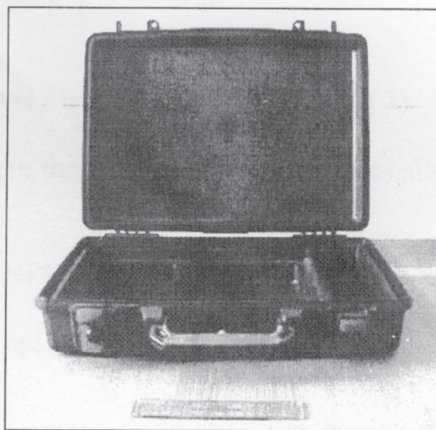
Samples Received:

Sample	Quantity	Serial Number	Date Received at Epsilon
Case Type 1470	1	01/S/205	12 February 2001
Case Type 1490	1	01/S/206	12 February 2001

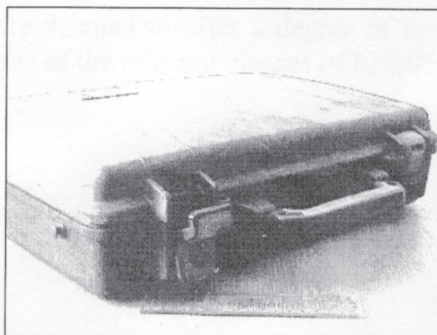
The manufacturer requires an ingress protection rating for the supplied range of carry-cases. The required ingress protection rating being IP57 (cat 2). This requires the apparatus to be waterproof and dust protected.

The tests were carried out on both samples provided by Pelican, to determine their suitability for their required IP rating.

Both cases had two hinges along the back edge, and two locking mechanisms along the front edge. A gasket was situated around the rim inside the upper half of the case which was compressed by a lip situated around the rim in the lower half of the case when the case was shut.



1470 Case



1470 Case

3 TESTS

3.1 Test Methods

The cases were subjected to ingress protection tests for a degree of protection IP57 (cat 2).

3.1.1 Ingress Protection Level First Numeral 5 (IP5X cat 2)

The test samples were placed inside the dust chamber in the horizontal position. No extraction was applied to the enclosures.

The samples were exposed to the specified dust environment for 8 hours.

3.1.2 Ingress Protection Level Second Numeral 7 (IPX7)

The test samples were immersed in a tank of water such that the lower part of the samples was 1 m below the surface of the water and the upper part of the samples were at least 150 mm below the surface of the water for 30 minutes.

3.2 Test Results

3.2.1 Ingress Protection Level First Numeral 5 (IP5X cat 2)

The samples were removed from the dust cabinet after 8 hours and examined for dust ingress; no ingress of dust was observed.

3.2.2 Ingress Protection Level Second Numeral 7 (IPX7)

The samples were removed from the water tank after 30 minutes and examined for ingress of water; no ingress was observed.

4 CONCLUSION

The test samples type tested are deemed to offer a degree of ingress protection IP57 (cat 2) in accordance with the requirements of the relevant clauses of EN60529: 1991.