

## TEST CERTIFICATE

CLIENT: Panorama Antennas Ltd  
61 Frogmore  
London  
SW18 1HF

CERTIFICATE NUMBER 6267/1 Issue 1

CUSTOMER ORDER NUMBER Kevin Davies

DATE OF RECEIPT

11 April 2008

TEST ITEM(S)

Part Number	Description
EF-S1-3F	"Easyfit" Covert Internally Mounted Glassmount Antenna 380-400MHz - 3m Cable - FME Socket Fitted
LP390	Low Profile Antenna 380-400MHz - 0.5m Cable - FME Plug Fitted
GM390-4F	Glassmount Antenna 380-400MHz - 4m Cable - FME Socket Fitted <b>External Assembly Only Tested</b>

TEST SPECIFICATION / ISSUE

BS EN 60529, 1992, IP6X: Category 1 Enclosure

DATE OF TEST

18 April 2008

TEST(S) APPLIED

Protection Against Solid Foreign Objects, Dust-tight

The LP390 was connected to a vacuum pump via a 6mm hole drilled into the dome, a vacuum of 19.9 mbar was applied, the airflow was below measurable, therefore an 8 hr test was required. It was not possible to apply a vacuum to the EF-S1-3F or the GM390-4F as they are completely sealed units with no cavity inside to pull a vacuum against. The units were placed in a turbulent dust chamber; the test conditions were as follows:

Dust Grade: BS EN 60529 Talc Test Dust

Concentration: 2 kg/m<sup>3</sup>

Duration: 8 hrs

Temperature/Humidity: 25.3°C / 41.3% rh

RESULT(S) OF TEST

There was no visible detrimental effect to any of the units caused by the dust. The excess dust was brushed off the units, the LP390 was opened and inspected, there was no visible dust ingress inside the unit. It was not possible to open the EF-S1-3F or the GM390-4F as they are completely sealed units with no enclosure to inspect. A performance check was performed by the client and witnessed by Particle Technology; the client reported that all three antennas were working correctly.

COMPLIANCE

The LP390 antenna conforms to the standard required by BS EN 60529, 1992, IP6X: Category 1 Enclosure.

Approved by .....  
G J Spicer, MEng  
Quality Manager

Date: 02 May 2008