

INTESPACE Reference E6668-ETS/IEC

CHAPTER 26

ELECTROSTATIC DISCHARGE IMMUNITY TEST



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26.1 TEST SPECIFICATIONS AND PROGRAMME

Following IEC 1000-4-2 (Clause 10.9.2 of EN60945):

<u>Severity level</u>: 3 (According IEC 1000-4-2) = 6 kV by «contact » = 8 kV on « Air »

<u>Susceptibility criteria</u>: The test has been performed in standby mode; susceptibility criteria is that the operate mode do not appear.

26.2 EQUIPMENT UNDER TEST

Beacon Unit : 5/7

Manufacturer : MARTEC

Type : KANNAD AUTO/AUTO GPS/MANUAL/MANUAL GPS/MANUAL+/MANUAL+GPS

Number : 57990 Class : II

26.3. DATES:

ESD Test start on: December 13th, 2005

ESD End of test : December 14th, 2005

26.3 TEST SITE

Toulouse Space Center (CST) - INTESPACE Laboratory.

26.4 TEST EQUIPMENT

Name	SN	Last calibration date
ESD Tester	PSD 258	05/2005

26.5 INJECTION METHOD

Two kinds of injection were aplied on the equipment:

- A series of positve poing and negative going polarity « Air » discharges at 8 kV were applied to all operate accessible fixtures.
- A series of positve poing and negative going polarity « Contact » discharges at 6 kV were applied to all operate accessible fixtures.



INTESPACE Reference E6668-ETS/IEC

26.6. RESULTS

No susceptibility were detected on the equipment.

26.7 SELF TEST ON:

Date: December 15th, 2005

Beacon Unit : 5/7

Manufacturer : MARTEC

Type : KANNAD AUTO/AUTO GPS/MANUAL/MANUAL GPS/MANUAL+/MANUAL+GPS

Number : 57990

Result: Self Test pass

26.8 ALIVENESS TEST RESULTS AFTER EDI TEST

Date: December 15th, 2005

Beacon Unit : 5/7

Manufacturer : MARTEC

Type : KANNAD AUTO/AUTO GPS/MANUAL/MANUAL GPS/MANUAL+/MANUAL+GPS

Number : 57990

Result: Aliveness Test pass

See aliveness test data next page



INTESPACE Reference E6668-ETS/IEC

Laboratoire de certification Controle balise ARGOS/SARSAT	After RFI and ESD Tests
Constructeur : MARTEC Modele : TOPAZE Numero de serie : 57990 UUTS Reference : E6569-2 Type : SARSAT	
Date de l'essai 15 Dec 2005 07: Temperature 23.4 Deg C	48:57
Message balise	
1100000000 1 1 1 1 1 1 1 1 1 1 1 1 1 1	FFFE2F8E3F38A18AE201739521760F28068D
Format flag (25): Protocole flag (26):	
Protocole flag (28): Code pays (27-36):	
F-V-	FRANCE
Code protocole (37-40):	
Protocole utilise :	National - Test
Identification :	
11011010	57990
BCH 1 lu/calcule (86-105/25-85):	
BCH 2 lu/calcule (133-144/107-132):	
Pos. Data Source (111):	internal
121.5 MHz Howing (112): Additional Data Pos. (110):	delta Pos
Position GPS de reference lab	
	Yes
Position GPS par defaut :	No No
Latitude position :	43~33'32'' Nord
congrued production.	: 1 28'40'' Est
Delta position	076 km
Controle message	
Dures de la porteuse pure	160.63ms +- 0.00 520.64 ms
Duree de l'emission Frequence de modulation	400.20Hz +- 0.00
•	750720112
Stabilite de frequence	
Frequence moyenne = 406027.93379	
SIGMA2 FZ-F1	8.533E-11
SIGMA3 F3-F2	1.132E-10
Mesures d'indice	· · · · · · · · · · · · · · · · · · ·
	·
F F1 61 49933.57 247 62	•
49933.57 247 62 49933.59 247 62	
70000.00 241 02 .	•
Excursion de phase totale	rd <= 2.48 2.19 rd 0.96< <1.24 1.10
Excursion de phase positive Excursion de phase negative	rd 0.96< <1.24 1.10 rd -1.24< <-0.96 -1.09
Symetrie de l'excursion	% <= 522
Mesures de pulsaance	
Dutanana a 400 MU 27 CC dOm	



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