

INTESPACE Reference

E6668-ETS/IEC

CHAPTER 25

RF FIELD IMMUNITY TEST



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25.1 TEST SPECIFICATIONS AND PROGRAMME

Following IEC 1000-4-3 (Clause 10.4 of IEC 60945):

Severity level: 3 (following IEC 1000-4-3) = 10 V/m.

Calibration at 6 V/m.

Calculation of the offset:

offset = $20 \log (10/6) = 4,44 \text{ dB}$.

Suceptibility criteria:

The test was run with EPIRB in Ready position without its bracket.

During the test the Epirb was endded with video camera if it was running (flash).

Only the accessible faces of Epirb was tested.

Note: This test is more restricting than the IEC specification because the EPIRB is normally protected by its bracket

25.2 EQUIPMENT UNDER TEST

Beacon Unit : 5/7

Manufacturer : MARTEC

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

Number: 57990 Class: II

21.3. DATES:

RS Test start on: December 14th, 2005

RS End of test : December 15th, 2005

25.4 TEST SITE

Toulouse Space Center (CST) - INTESPACE Laboratory. Hight Field Anechoïc Chamber



INTESPACE Reference

E6668-ETS/IEC

25.5 TEST EQUIPMENT

Generator:

Name & SN	Frequency Range	Calibration validity
RS SMG	100kHz-1GHz	06/2006

Amplificator:

Name & SN	Frequency Range	Calibration validity
AR 2000L	10kHz-220MHz	12/2005
AR 1000HA	220MHz-400MHz	12/2005
KALMUS LA500UE	400MHz-500MHz	02/2006
KALMUS 722FC	500MHz-1GHz	02/2006

Field sensor:

Name & SN	Frequency Range	Calibration validity
HOLADAY 3004	30MHz-1GHz	01/2006
HOLADAY Hi 3113	30MHz-1GHz	01/2006

Power meter:

Name & SN	Frequency Range	Calibration validity
NAP+sonde 350W	25MHz-1GHz	08/2006+02/2006
HP438+sonde8482A	100kHz-4,2GHz	04/2006+04/2006

Coupleur:

Name &	₹ SN	Frequency Range	Calibration validity
AR DC2000	NS1715		08/2006

Antenna:

Name & SN	Frequency Range	Last calibration date
Biconique 3109 NS2068	30MHz-200MHz	03/2006
LOG PER R&S HUF-Z3	200MHz-1GHz	10/2006



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E6668-ETS/IEC

25.6 RESULTS

No susceptibility were detected on the equipment.

25.7 SELF TEST CONTROL

Nothing abnormal to note

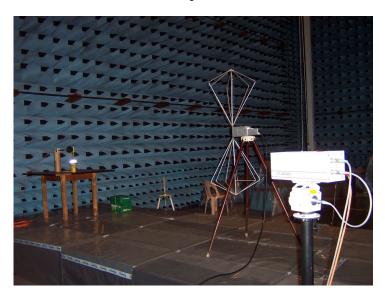
See Photos and Aliveness Test Result next page

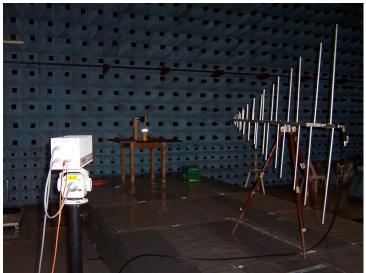


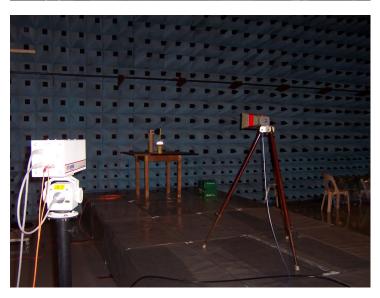
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Test photos









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Laboratoire de certification
                                               RFI and ESD Tests
                                       AFter
Controle balise ARGOS/SARSAT_
                  : MARTEC
   Constructeur
                  : TOPAZE
  Modele
   Numero de serie: 57990 UUTS
                 · E8658-2
   Reference
                  : SAREAT
   Type
   Date de l'essai 15 Dec 2005 07:48:57
   Temperature
                   23.4 Deg C
Message balise___
                          (1-144): FFFE2F8E3F38A18AE201739521760F28058D
Message recu
Format flag
                            (25): 1
                             (28): 0
Protocole flag
Code pays
                          (27-36): 0227
                                 : FRANCE
Pavs
Code protocole
                          (37-40): 1111
                               : National - Test
Protocole utilise
Identification
                                 : 57990
Numero
BCH { lu/calcule (86-105/25-85): 0E5485/0E5485
BCH 2 lu/calcule (133-144/107-132): 680/680
Pos. Data Source
                          (111): Internal
121.5 MHz Homing
                            (112): No
Additional Data Pos. (110): delta Pos.
Position GPS de reference lab : N 43-33'34'' E 1-28'42
Position GPS
                                 : Yes
Position GPS par defaut
                                 : No
Latitude position
                                : 43<sup>-</sup>33'32'' Nord
                                 : 1 28'40'' Est
Longitude position
                                 : .078 km
Delta position
Controle message_
                                                         160.63ms +- 0.00
Duree de la porteuse pure
                                                         520.84 ms
Duree de l'emission
                                                         400.20Hz +- 0.00
Frequence de modulation
Stabilite de frequence_
Frequence moyenne = 406027.93379 KHz
                 F2-F1
                                            8.533E-11
SIGMA2
SIGMA3
                  F3-F2
                                            1.132E-10
Mesures d'indice_
                     61
 49933.57 247
                    62
 49933.59 247
                    62
Excursion de phase totals
                                  rd
                                         <= 2.48
                                                         2.19
                                      0.95< <1.24
-1.24< <-0.96
                                                         1.10
Excursion de phase positive
                                  rd
Excursion de phase negative
                                  rd
                                                        -1.09
Symetrie de l'excursion
                                        <≃ 5
                                                         -.22
Mesures de puissance .
Priseance a 406 MHz = 37.65 dBm.
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