

NF C 17-102

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UTE

L'échantillon doit être soumis trois fois à un courant d'essai donné dans le Tableau C.2. L'intervalle de temps entre chaque essai doit permettre à l'échantillon de se refroidir à la température ambiante.

Tableau C.2 – Valeur du courant I_{imp}

$I_{crête}$ (kA)	Q (A.s)	W/R (kJ/Ω)
100	50	2 500

Une forme d'onde typique pouvant réaliser ces paramètres est l'onde 10/350. La relation entre $I_{crête}$, Q et W/R est donnée par les formules :

$$Q \text{ (As)} = 0,5 I_{crête} \text{ (kA)} \quad \text{(C.1)}$$

$$W/R \text{ (kJ/}\Omega\text{)} = Q^2 \text{ (As)} \quad \text{(C.2)}$$

Les tolérances sur la valeur crête du courant $I_{crête}$, la charge Q et l'énergie spécifique W/R sont :

- $I_{crête} \pm 10 \%$
- $Q \pm 20 \%$
- $W/R \pm 35 \%$



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TEST REPORT (SIMPLIFIED)

Nº LRIC-IE13-65-6

DATE OF ISSUE:	15/04/2014
TESTING LABORATORY:	Lightning Research Institute of Catalonia
APPLICANT'S NAME:	Cirprotec, S.L. C/ Lepanto, 49 - 08223 - Terrassa (Barcelona) - Spain
TEST SPECIFICATION	
TEST:	C.3. Type test
TEST METHODOLOGY:	UNE 21186: Protección contra el rayo: Pararrayos con dispositivo de cebado (2011). NF C 17-102: Protection contre la foudre: Systèmes de protection contre la foudre à dispositif d'amorçage (2011) PRLAB17 version 3.0.
OBJECT UNDER TEST	
TRADE MARK:	CPT
MANUFACTURER:	Cirprotec, S.L. C/ Lepanto, 49 - 08223 - Terrassa (Barcelona) - Spain
MODEL:	Nimbus 60 (complete description see page 2).
RECEPTION DATE:	14/05/2013

Test results contained in this report refer exclusively to the objects under test. Tests have been performed on one sample.

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The complete information on the test is available to the customer.



Bárbara Vidal Jiménez
Technical Manager

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TEST NUMBER: LRIC-IE13-65-6



Figure 6.4.1. State of the sample after the sulfur dioxide test

6.5. Current test



Figure 6.5.1. State of the sample after the current test

PASS CRITERIA	RESULT
The current recordings don't reveal any indication of deterioration or perforation of the sample.	PASS
The visual inspection don't reveal any indication of deteriorations or perforation excepts the part that drain off the lightning current where traces of emissions and superficial fusion can appear.	PASS

Table 6.5.1. Pass criteria for current test

6.6. Early streamer emission test

PASS CRITERIA	RESULT
Normalized average emission time for the object under test is lower than the one obtained for the reference rod ($T_{pOC} < T_{pR}$)	PASS
The standard deviation of the object under test is lower than the 80% of the value obtained for the reference rod ($\sigma_{pOC} < 0.8 \cdot \sigma_{pR}$)	PASS
Early streamer emission value upper or equal than the declared, being the minimum value $10\mu s$	PASS

Table 6.6.1. Pass criteria for early streamer emission test

7. General conditions

7.1. Validity of this document

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