

ADAS Subroutine ee3

```
FUNCTION EE3 (X)
C
C      IMPLICIT REAL*8 (A-H,O-Z)
C
C-----
C
C ***** FORTRAN77 FUNCTION: EE3 *****
C
C PURPOSE: EVALUATES EXP (X) E3 (X) WHERE E3 IS THE 1ST EXPONENTIAL
C           INTEGRAL
C
C CALLING PROGRAMS: GENERAL
C
C INPUT:   (R*8)  X           = INDEPENDENT VARIABLE
C
C OUTPUT:  (R*8)  EE3        = EXP (X) E3 (X)
C
C ROUTINES:
C          ROUTINE    SOURCE    BRIEF DESCRIPTION
C          -----
C          EE2        ADAS      EVALUATES 2ND EXPONENTIAL INTEGRAL
C
C UNIX-IDL PORT:
C
C VERSION: 1.1                DATE: 06-03-96
C MODIFIED: TIM HAMMOND (TESSELLA SUPPORT SERVICES PLC)
C           - PUT UNDER S.C.C.S. CONTROL
C
C VERSION: 1.2                DATE: 17-4-07
C MODIFIED: HUGH SUMMERS
C           - COMPLETED COMMENT BLOCK DESCRIPTION
C-----
C
      IF (X-30.0D0) 1,1,2
1  EE3=0.5D0*(1.0D0-X*EE2 (X) )
      GO TO 3
2  X1=1.0D0/X
      EE3=X1*(1.0D0-X1*(3.0D0-X1*(12.0D0-X1*(60.0D0-X1*(360.0D0-X1*
1 (2520.0D0-X1*20160.0D0))))))
3  RETURN
      END
      REAL*8          X
```