(define (problem p-extra-perillos)

(:domain laberint-perillos)

(:objects

vermell groc verd porpra arc\_de\_sant\_marti - color

loc-1-1 loc-1-2 loc-1-3

loc-2-1 loc-2-2 loc-2-3

loc-3-1 loc-3-2 loc-3-3 - habitacio

clau1 clau2 clau3 clau4 clau5 - clau

c1112 c1122

c1213

c1222 c2223

c2112 c2121

c2132

c2221

c2233

c3132 c3233 - passadis

)

(:init

(es-troba loc-1-1)

(not (porta-clau))

; Connexions horitzontals

(conecta c1112 loc-1-1 loc-1-2)

(conecta c1112 loc-1-2 loc-1-1)

(conecta c1213 loc-1-2 loc-1-3)

(conecta c1213 loc-1-3 loc-1-2)

(conecta c2121 loc-2-1 loc-2-2)

(conecta c2121 loc-2-2 loc-2-1)

(conecta c2223 loc-2-2 loc-2-3)

(conecta c2223 loc-2-3 loc-2-2)

(conecta c3132 loc-3-1 loc-3-2)

(conecta c3132 loc-3-2 loc-3-1)

(conecta c3233 loc-3-2 loc-3-3)

(conecta c3233 loc-3-3 loc-3-2)

; Connexions verticals

(conecta c1122 loc-1-2 loc-2-2)

(conecta c1122 loc-2-2 loc-1-2)

(conecta c2112 loc-2-1 loc-1-1)

(conecta c2112 loc-1-1 loc-2-1)

(conecta c2221 loc-2-2 loc-3-2)

(conecta c2221 loc-3-2 loc-2-2)

(conecta c2233 loc-2-3 loc-3-3)

(conecta c2233 loc-3-3 loc-2-3)

(conecta c2132 loc-2-1 loc-3-1)

(conecta c2132 loc-3-1 loc-2-1)

; Claus

(clau-a clau1 loc-3-3)

(clau-a clau2 loc-1-1)

(clau-a clau3 loc-3-1)

(clau-a clau4 loc-1-3)

(clau-a clau5 loc-2-3)

; Bloquejos

(bloquejat c1213 vermell)

(bloquejat c2132 groc)

(bloquejat c2223 verd)

(bloquejat c3233 porpra)

(bloquejat c2112 arc\_de\_sant\_marti)

; Passadissos perillosos

(perillós c1213)

; Claus i colors

(obre clau1 vermell)

(obre clau2 groc)

(obre clau3 verd)

(obre clau4 porpra)

(obre clau5 arc\_de\_sant\_marti)

; Usos de claus

(= (usos clau1) 1)

(= (usos clau2) 2)

(= (usos clau3) 2)

(= (usos clau4) 1)

(= (usos clau5) 1)

)

(:goal

(and

(es-troba loc-3-3)

)

)

)