

**Effectiveness of sprinklers in
residential premises**

Section 5: Experimental
programme (Appendix 5C)

Project report number 204505

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Appendix 5C – Graphs of optical density per m, visibility and fractional effective dose against time at each location for House fires

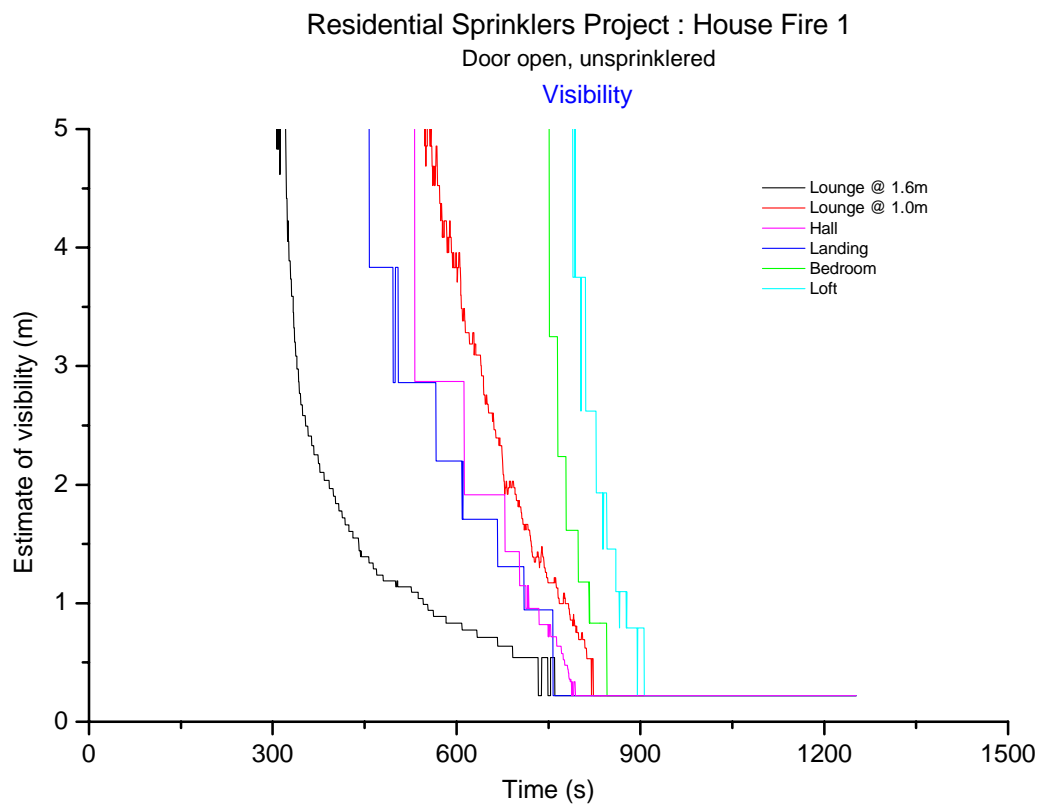
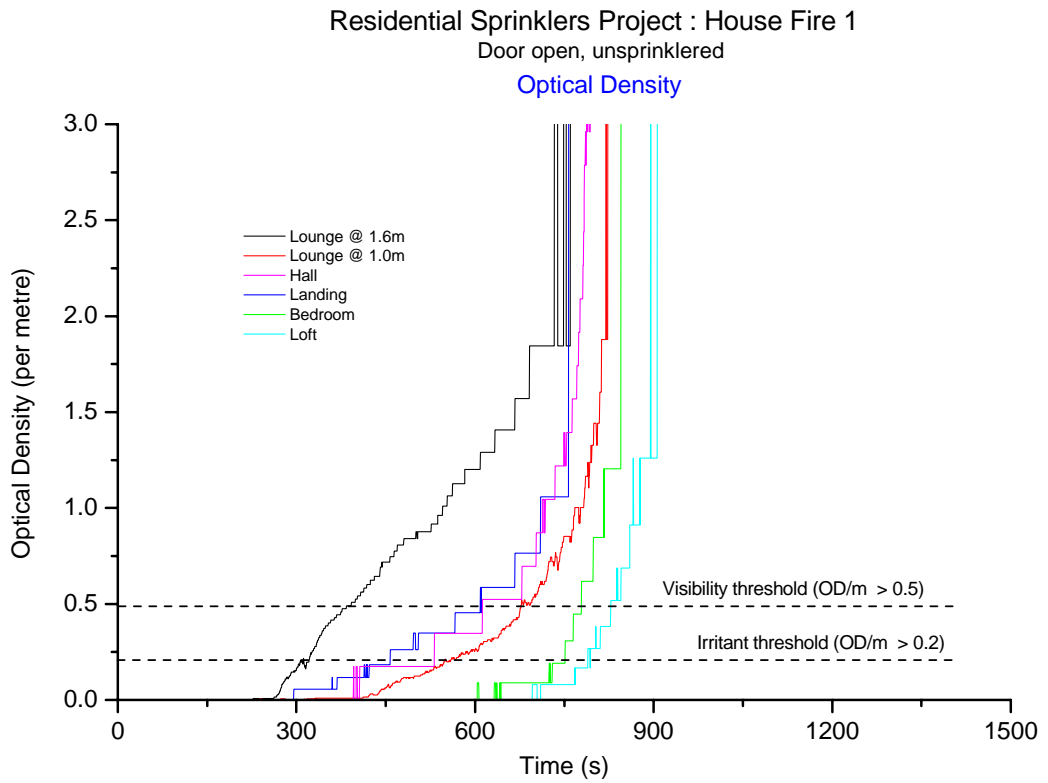


Figure 5C.1 Optical Density (per metre) and visibility: Test 1

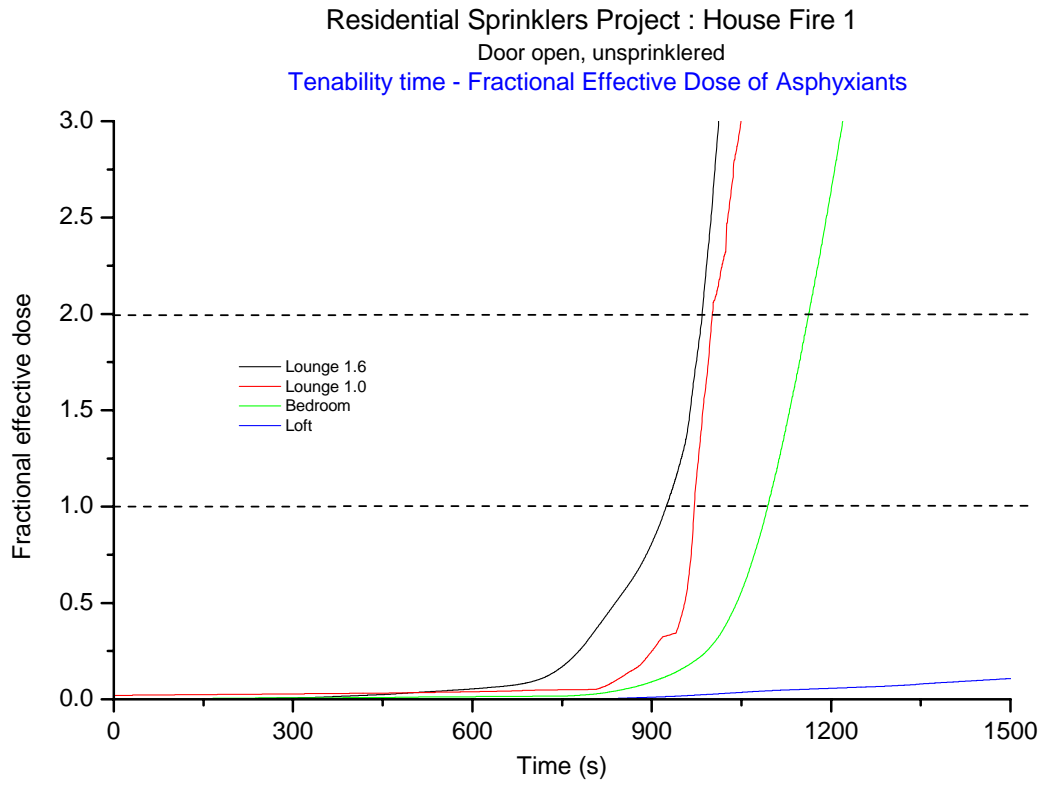


Figure 5C.2 Fractional Effective Dose: Test 1

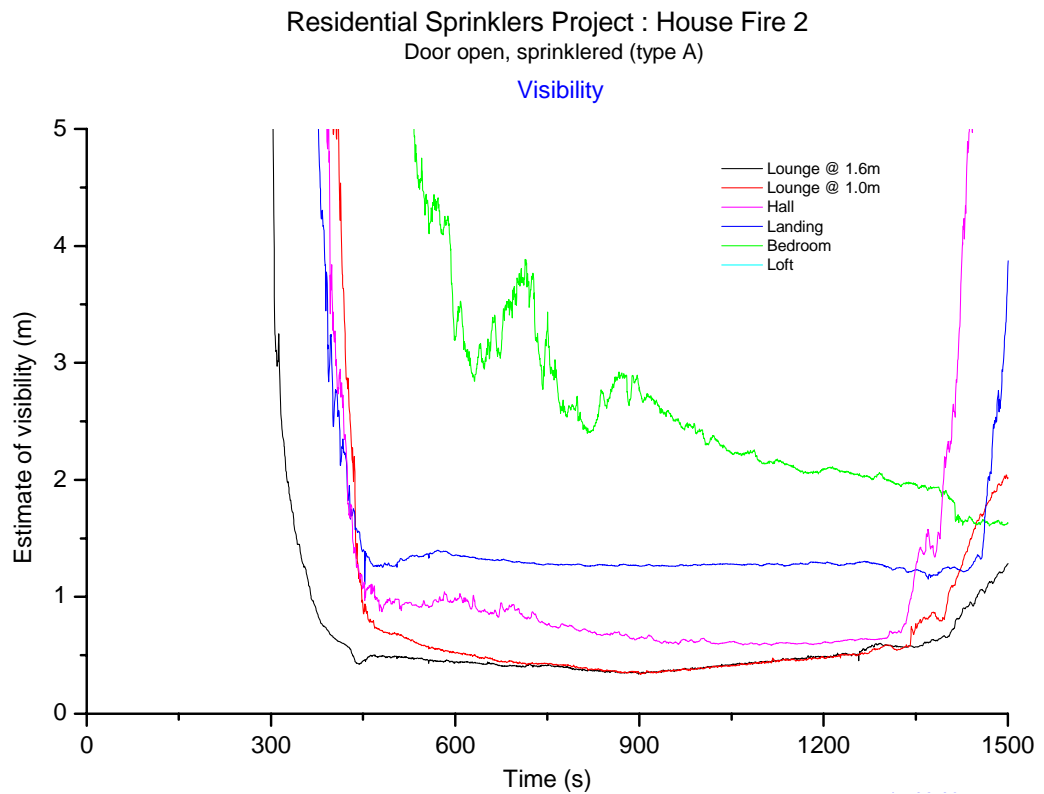
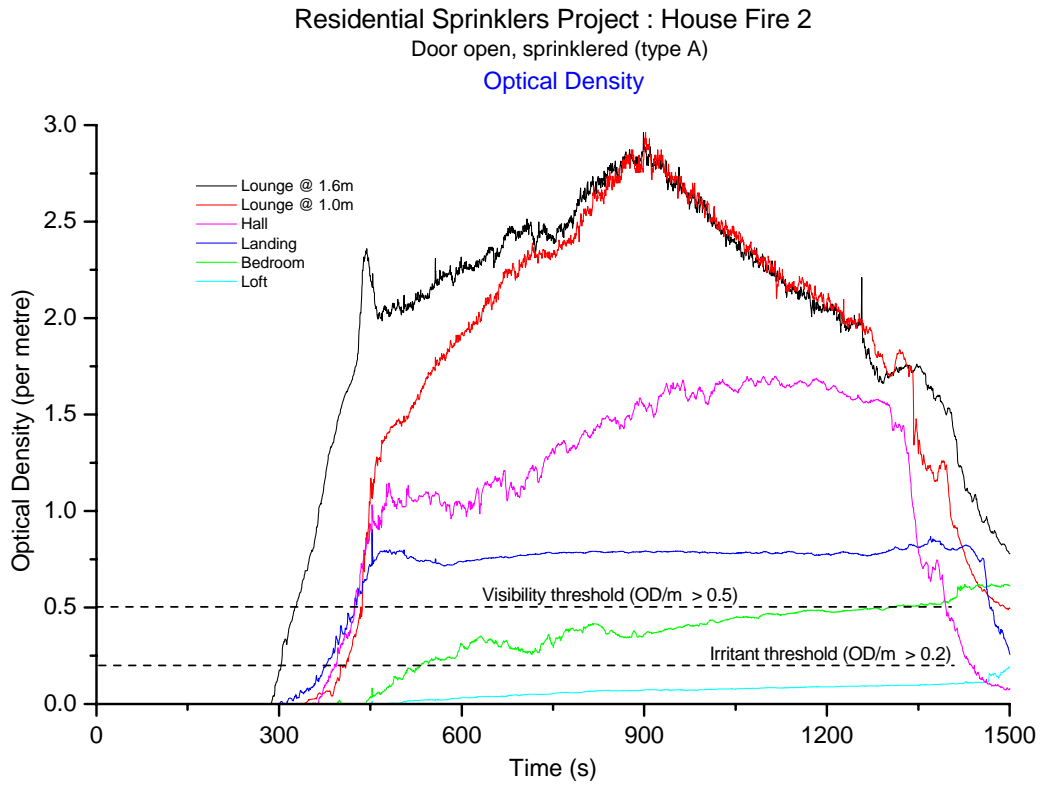


Figure 5C.3 Optical Density (per metre) and visibility: Test 2

Residential Sprinklers Project : House Fire 2
 Door open, sprinklered (type A)
 Tenability time - Fractional Effective Dose of Asphyxiants

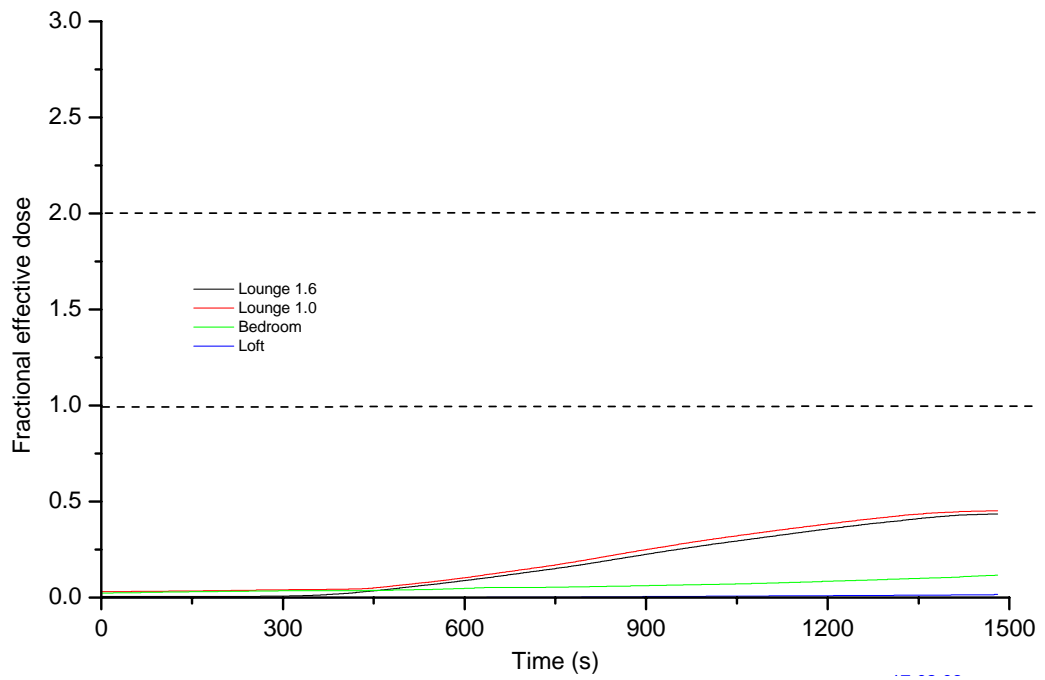


Figure 5C.4 Fractional Effective Dose: Test 2

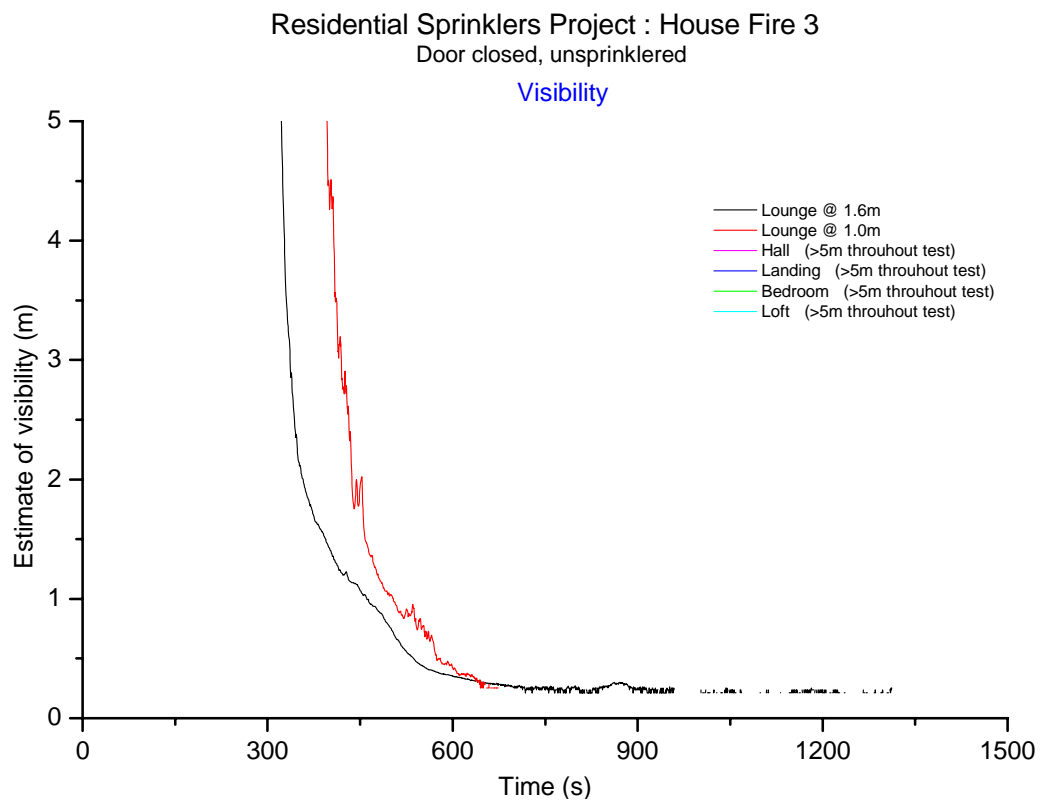
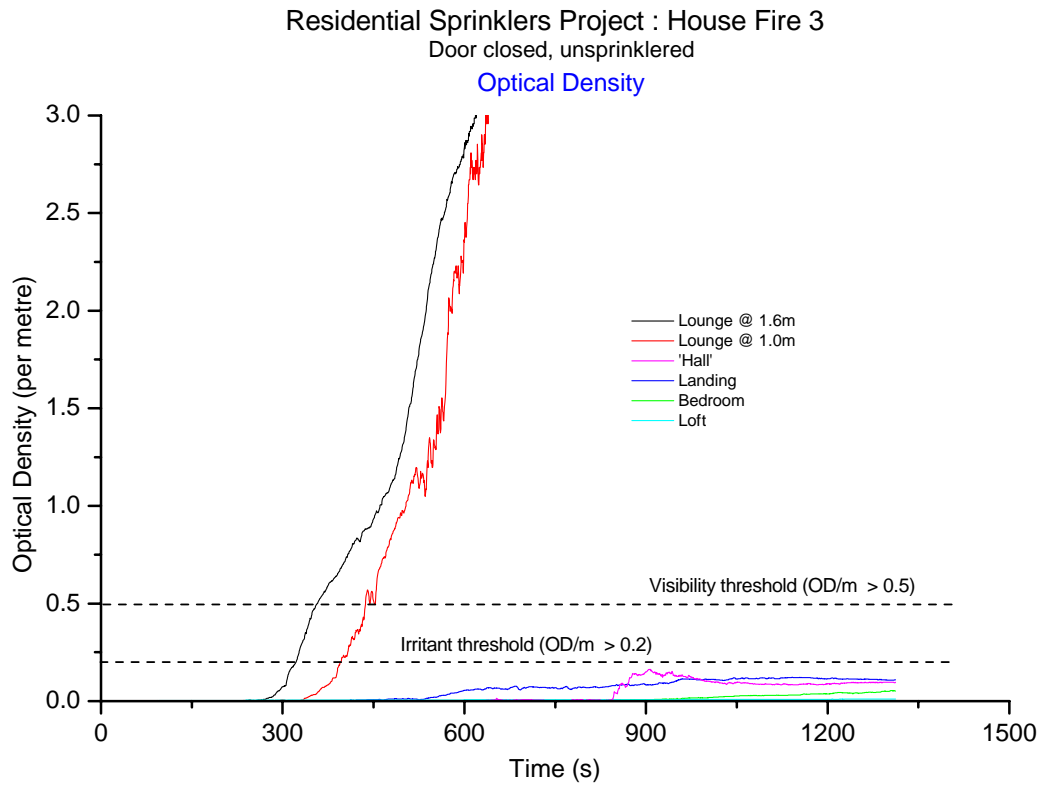


Figure 5C.5 Optical Density (per metre) and visibility: Test 3

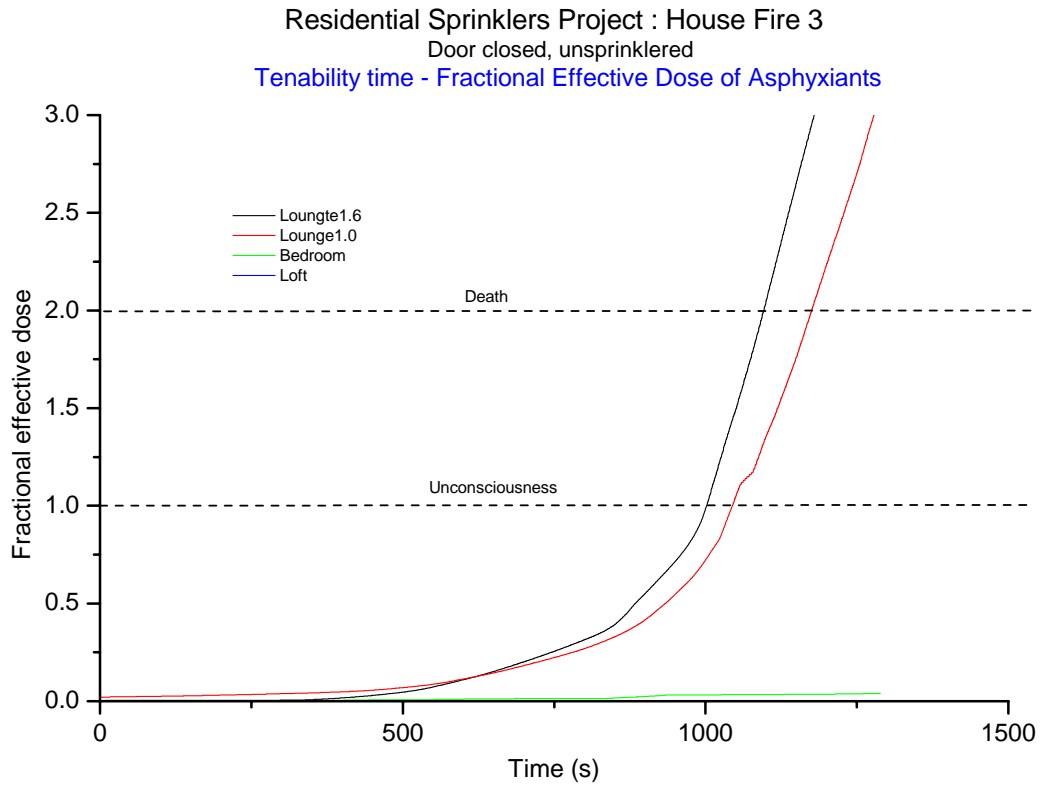


Figure 5C.6 Fractional Effective Dose: Test 3

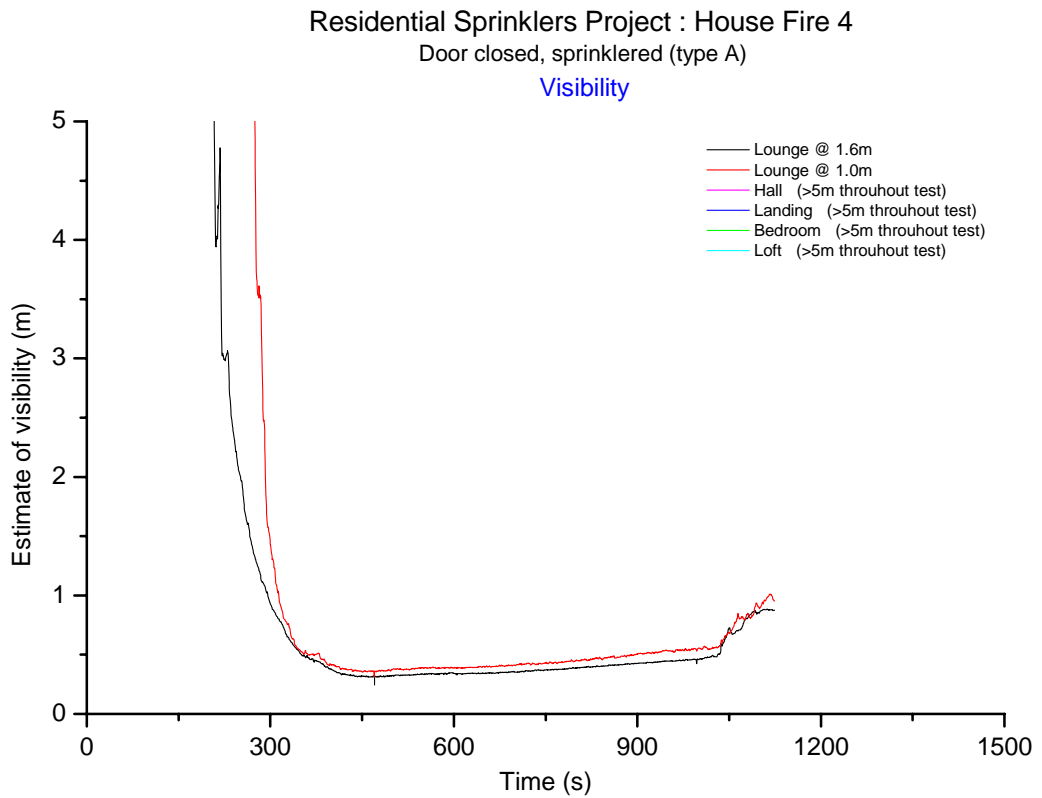
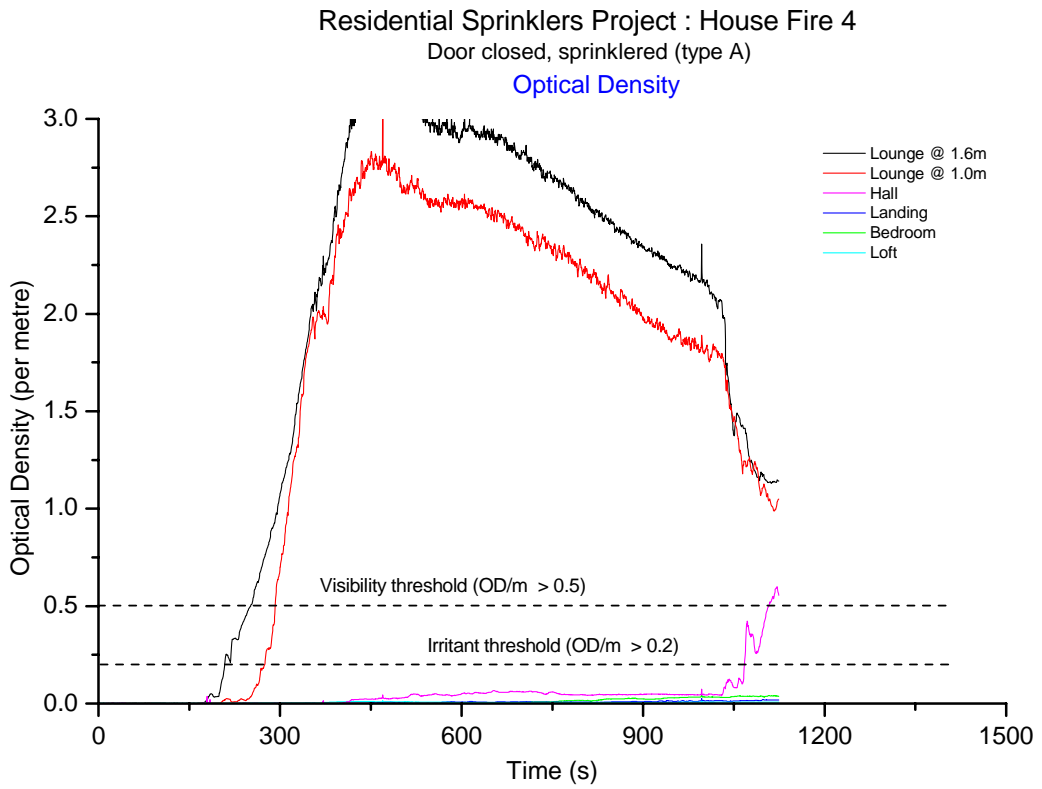


Figure 5C.7 Optical Density (per metre) and visibility: Test 4

Residential Sprinklers Project : House Fire 4
 Door closed, sprinklered (type A)
 Tenability time - Fractional Effective Dose of Asphyxiants

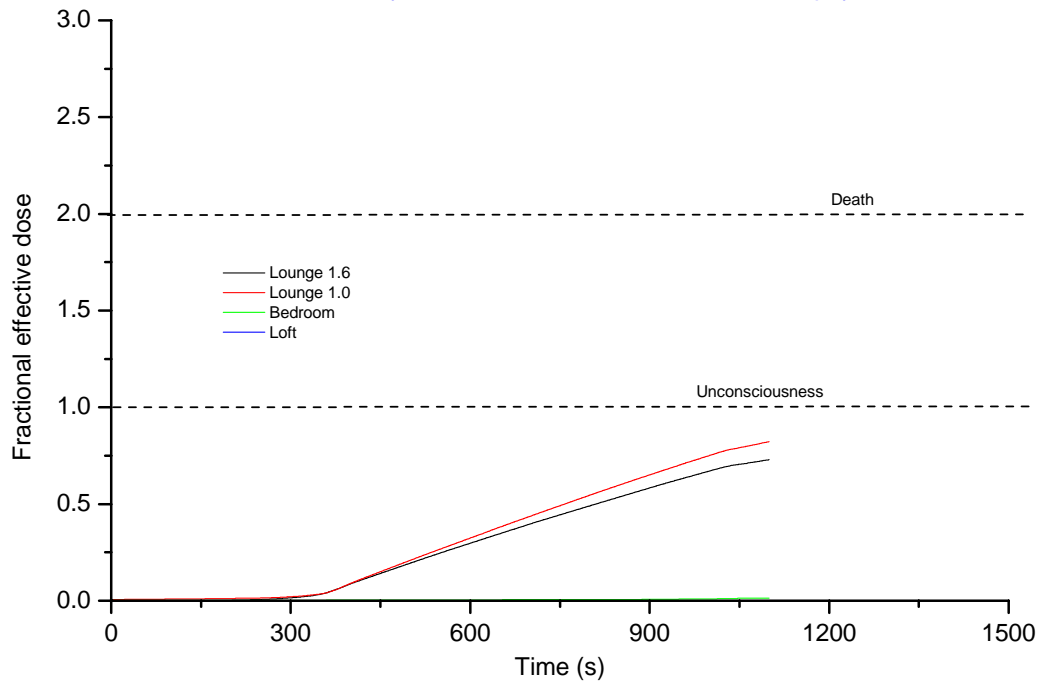


Figure 5C.8 Fractional Effective Dose: Test 4

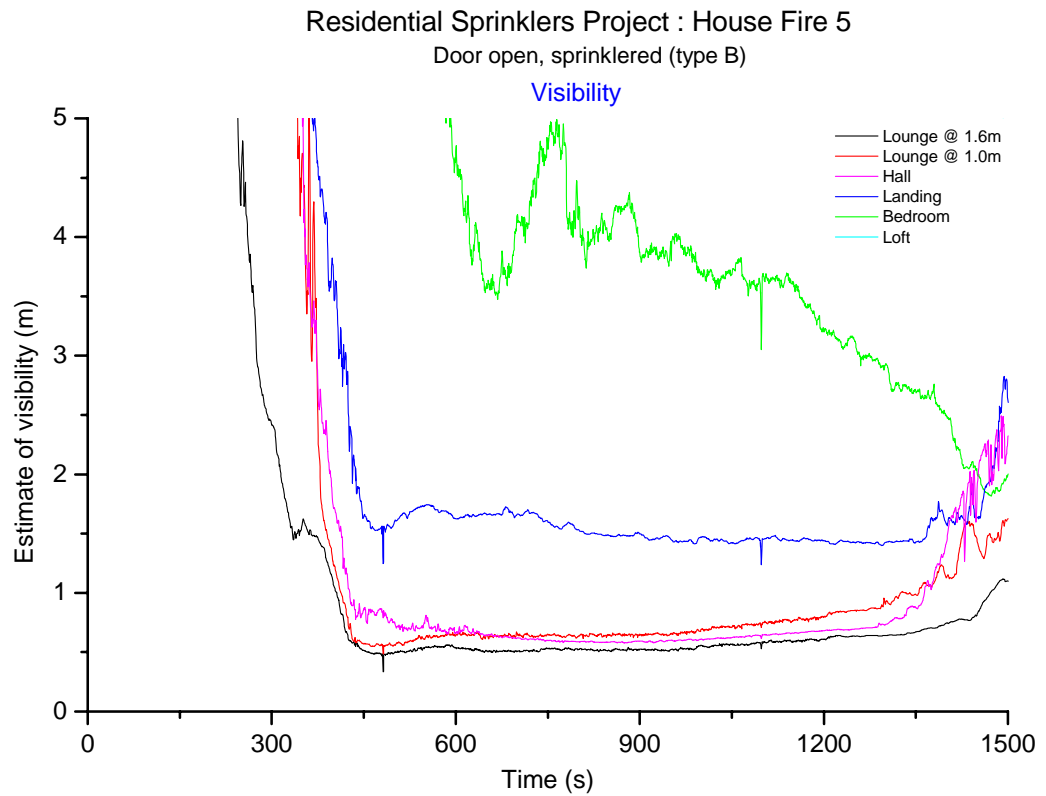
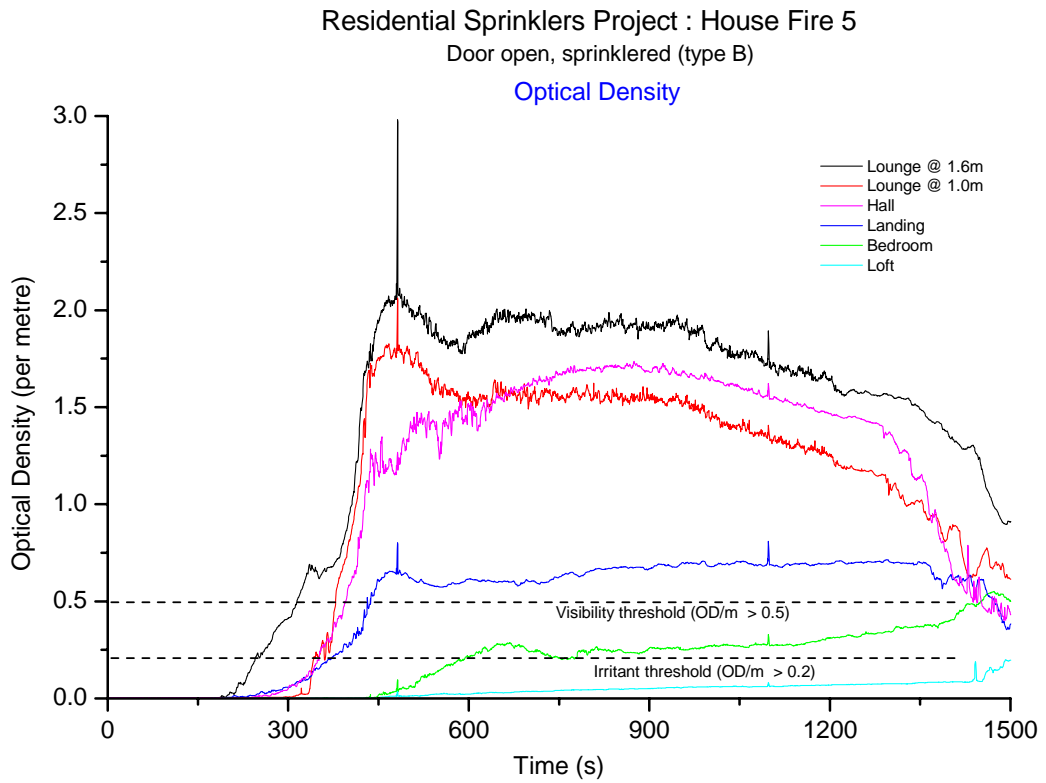


Figure 5C.9 Optical Density (per metre) and visibility: Test 5

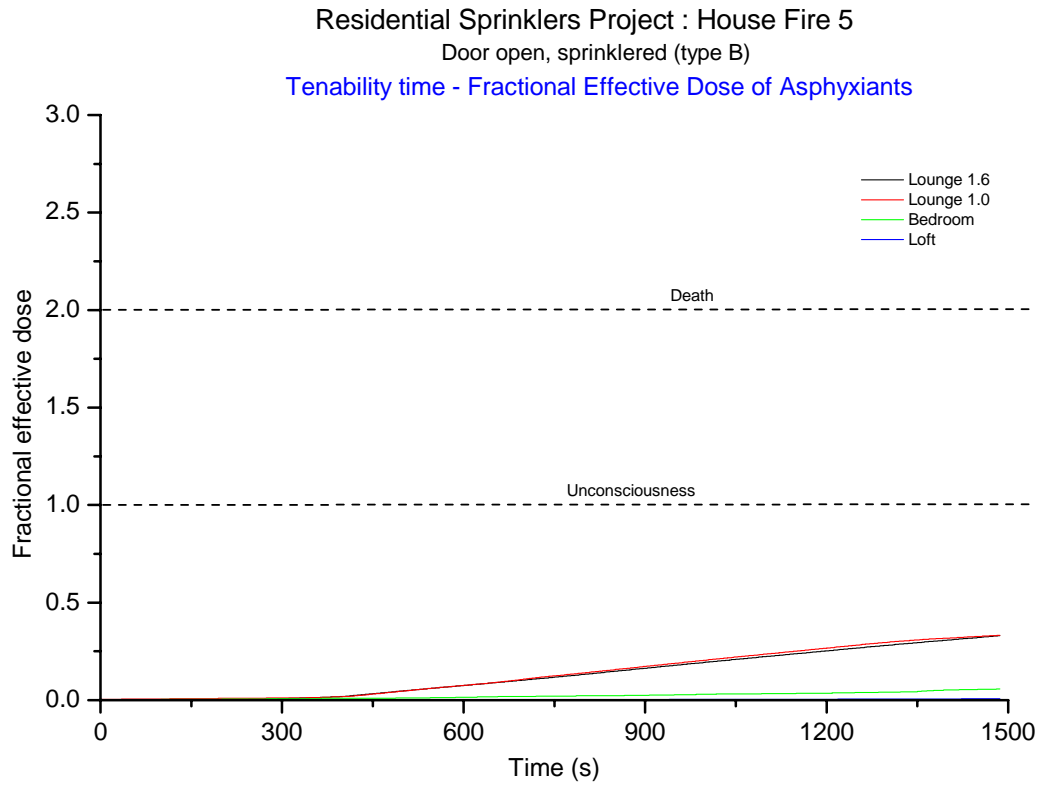


Figure 5C.10 Fractional Effective Dose: Test 5

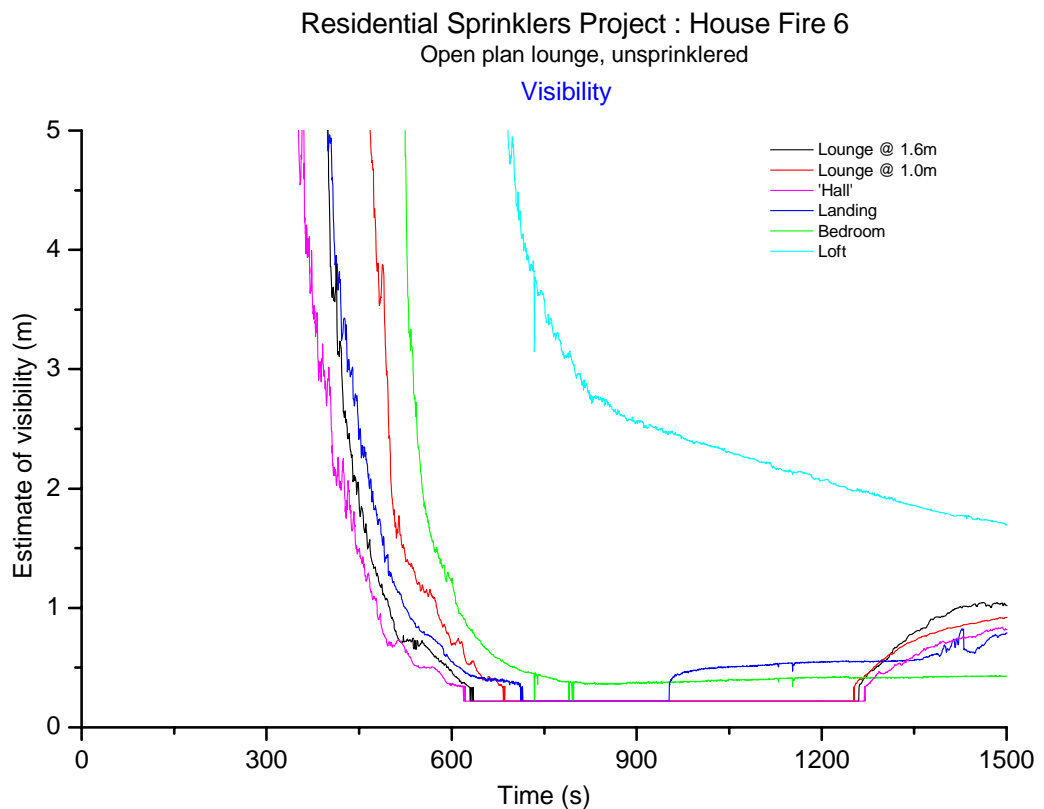
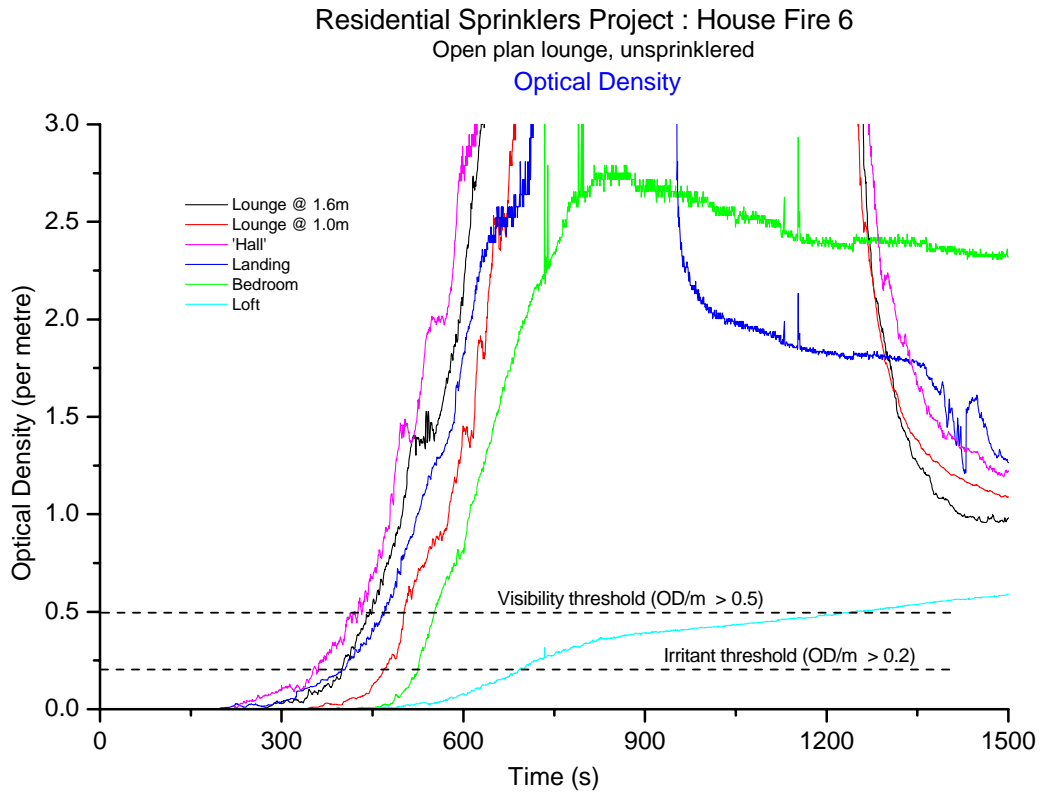


Figure 5C.11 Optical Density (per metre) and visibility: Test 6

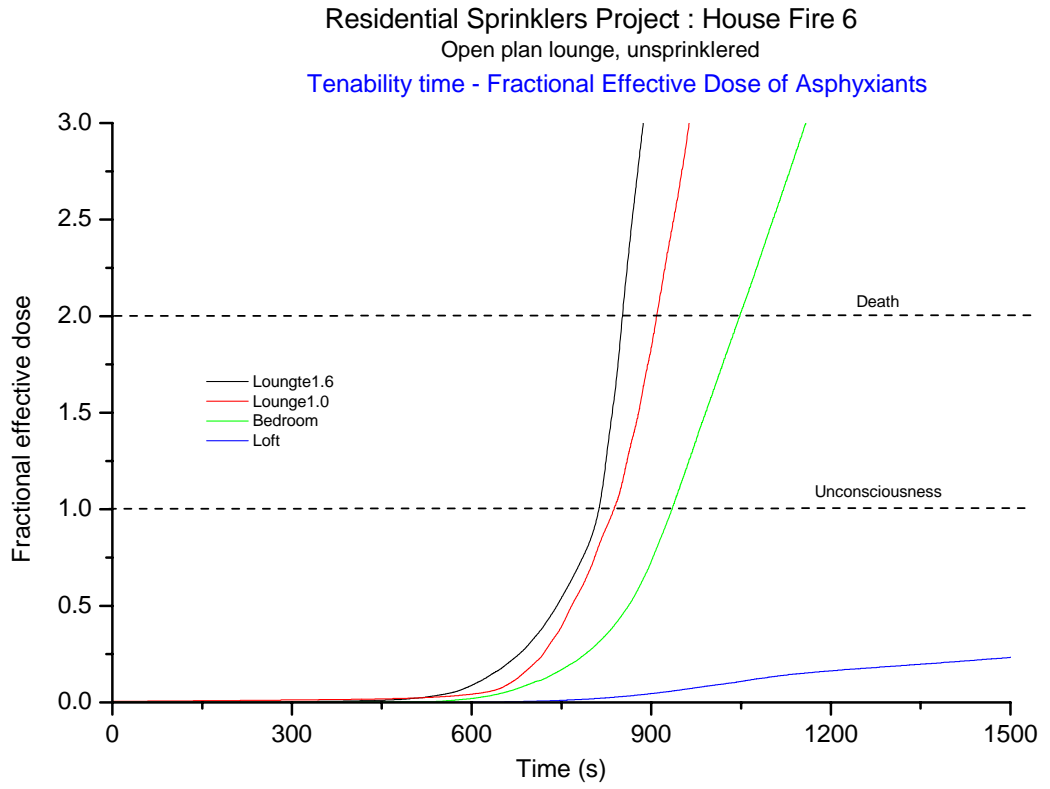
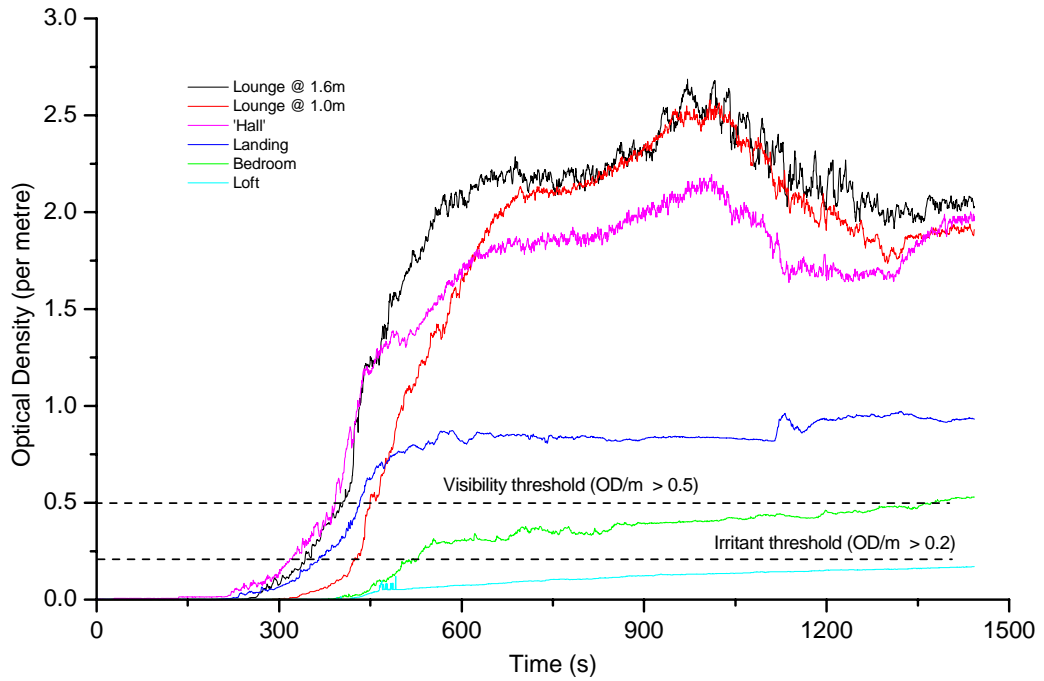


Figure 5C.12 Fractional Effective Dose: Test 6

Residential Sprinklers Project : House Fire 8
Open plan lounge, sprinklered (type A)

Optical Density



Residential Sprinklers Project : House Fire 8
Open plan lounge, sprinklered (type A)

Visibility

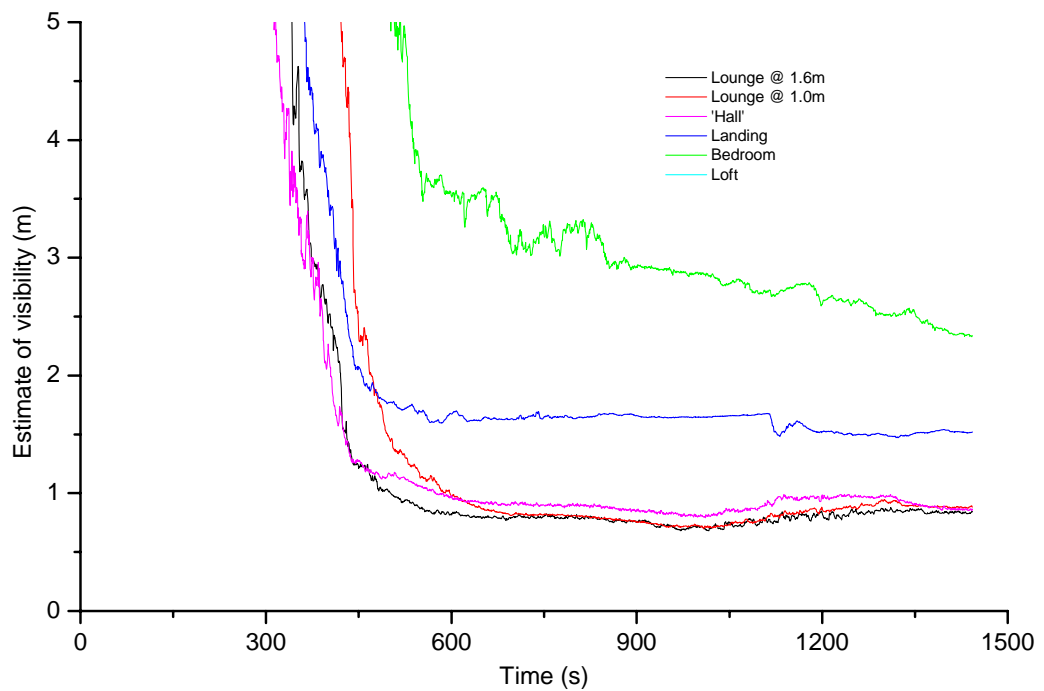


Figure 5C.13 Optical Density (per metre) and visibility: Test 8

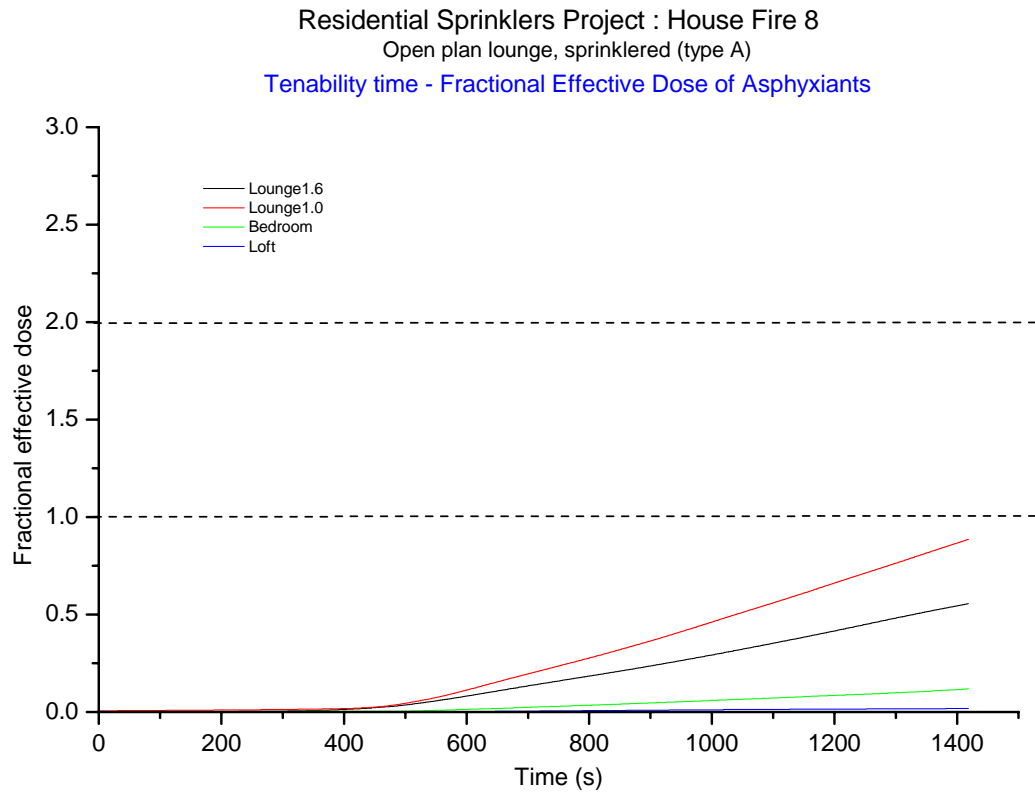


Figure 5C.14 Fractional Effective Dose: Test 8

Analysis of Task 5