



U. S. Department of Justice

Fire Research Laboratory
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Test record

ASCLD/LAB-*International* Testing Accreditation
Certificate ALI-217-T

Title	Evaluation of Ignitability of Carpet Using Multiple Ignition Devices		
Test Type	Custom		
Lab Number	16F0075-2	Author	
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Introduction

Thirty four (34) experiments were conducted to investigate the ignitability of carpet using five different ignition methods. Carpet was exposed to the following ignition methods: ignited cigarettes, ignited stick and paper matches, butane lighter, propane torch. Tests, using cigarettes and matches, were run until ignition of the carpet or the ignition source self-extinguished. Tests, using the butane lighter and the propane torch, were run in predetermined patterns for a set duration. Photographs and videos were recorded during the experiments. The experiments were conducted in the Medium Burn Room (MBR) of the Bureau of Alcohol, Tobacco, Firearms and Explosive (ATF) Fire Research Laboratory (FRL) located in Beltsville, MD.

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Results for Test 22 (ID 203899)	80
Results for Test 23 (ID 203900)	82
Results for Test 24 (ID 203901)	84
Results for Test 25 (ID 203902)	86
Results for Test 26 (ID 203903)	89
Results for Test 27 (ID 203904)	94
Results for Test 28 (ID 203905)	98
Results for Test 29 (ID 203906)	101
Results for Test 30 (ID 203907)	104
Results for Test 31 (ID 203908)	106
Results for Test 32 (ID 203909)	108
Results for Test 33 (ID 203910)	110
Results for Test 34 (ID 203911)	112

NOTE : All dimensional measurements were taken in English units and were later converted to metric units. Any inconsistencies between the two units are due to rounding errors when the English units were converted to metric.

Experiment Setup

Experiments were conducted under the 1 Megawatt (MW) Fire Product Collector (FPC) in the MBR, as shown in Figure 1. Each experiment included the carpet sample positioned on a sheet of gypsum wallboard.



Figure 1. Experimental setup (193874_792750.jpg)

Carpet

As shown in

Table 1, four carpet samples were used during testing. Carpet pile heights ranged between 0.9 cm (0.34 in) to 2 cm (0.78 in). Carpet samples were cut into two (2) different size squares: 91 cm (36 inches) and 61 cm (24 inches).

All carpet samples were conditioned in the MBR for at least five (5) days prior to testing. The temperature in the room during that period averaged 24 degrees Celsius (75 degrees Fahrenheit). The humidity during that period averaged 53%. Since this is not an actively conditioned space, the minimum humidity during the period was 40% and the maximum humidity during the period was 69%. During each test, the carpet sample tested was placed on a 4 ft x 8 ft sheet of gypsum wallboard.

Table 1. Carpet Samples

Sample Label	Carpet Brand	Description	Style	Pile Height cm/(inch)	Model Number
A	Lifeproof	Tyus II	texture	2.0/(0.78)	H5042-4205-1200-AB
B	Platinum Plus	Harvest II	texture	1.4/(0.56)	H5058-5935-1200
D	Softspring	Tremendous II	texture	1.3/(0.5)	HDC8181702
E	Lifeproof	Fashion Feature	pattern	0.9/(0.34)	H5050-5006-1200-AB

Ignition

Five (5) types of ignition devices were used during testing; cigarettes, paper matches, stick matches, butane lighter and propane torch.

Cigarettes

The first ignition device was a cigarette. As seen in Figure 2, cigarettes used during this test series were Marlboro Lights 100's. The cigarettes used were not fire-safe cigarettes. The Universal Product Code (UPC) associated with the carton was 28200-10190, and the UPC associated with the packs was 288192. Ignition of the cigarettes was achieved using the equipment shown in Figure 3. A diaphragm pump, connected to eight (8) cigarette mounting ports, drew air through each cigarette as a butane stick lighter ignited them. The ignited cigarettes were placed on the carpet, as seen in Figure 4. At the top of Figure 4, three (3) cigarettes were positioned side by side. The remaining five (5) cigarettes were arranged individually in a circular pattern.

The cigarettes were conditioned in an environmental chamber for at least (5) days prior to testing. The temperature in the chamber during that period averaged 21 degrees Celsius (70 degrees Fahrenheit). The humidity during that period averaged 51%.



Figure 2. Cigarettes (193874_792741.jpg)

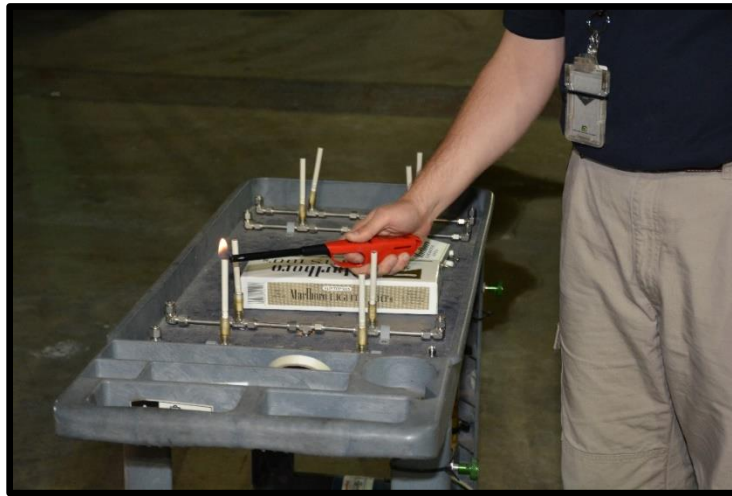


Figure 3. Ignition of Cigarettes (193874_792760.jpg)

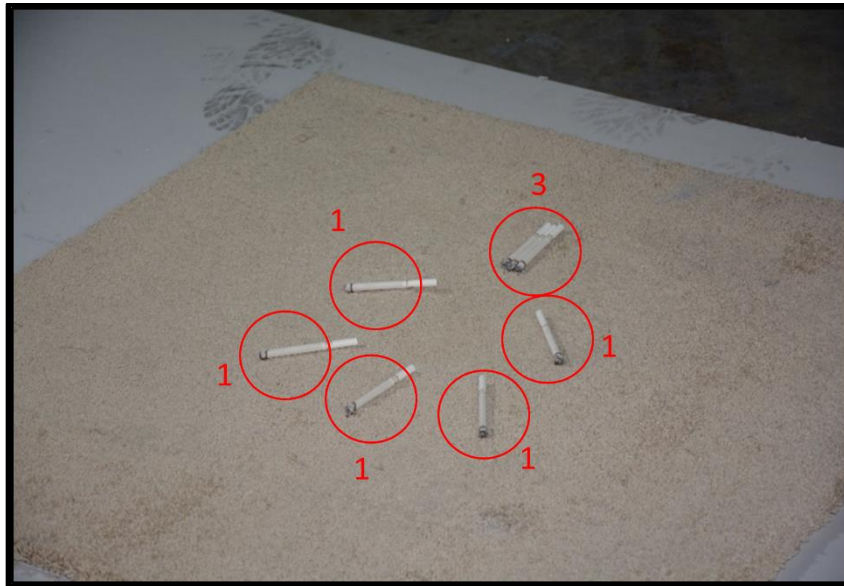


Figure 4. Cigarettes Placed on Carpet (193874_792775.jpg)

Matches

Paper and stick matches were used as ignition devices.

Paper Matches

The second ignition device was a paper match. Eight (8) paper matches were arranged in the configuration shown in Figure 5. On the right side of Figure 5, three matches were positioned side by side. The remaining five (5) matches were arranged individually in a circular pattern. Figure 6 shows an image of the matches in the match book prior to testing. The matches were manufactured by Brandmark, Inc in New Freedom, PA. The matches were ignited at their set location on the carpet sample using a butane lighter as seen in Figure 7.



Figure 5. Paper Matches Placed on Carpet (193882_793005.jpg)

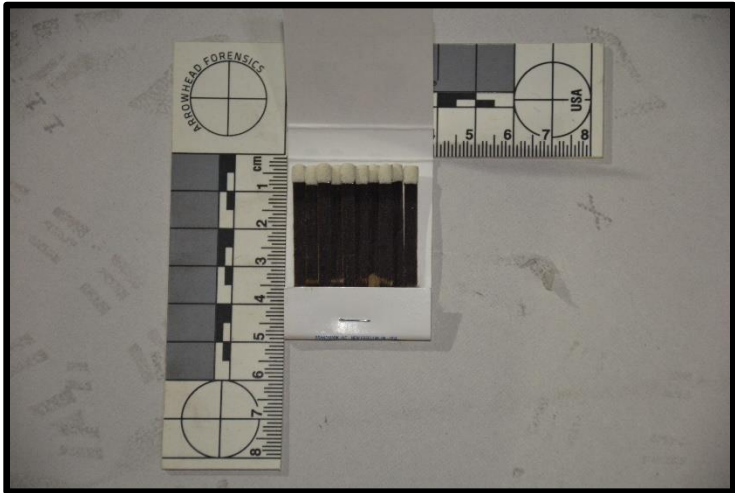


Figure 6. Paper Matches (193882_793008.jpg)



Figure 7. Ignition of Paper Matches (193882_793011.jpg)

Stick Matches

The third ignition device was a stick match. Eight (8) stick matches were arranged in the configuration shown in Figure 8. At the top left of Figure 8, three matches were positioned side by side. The remaining five (5) matches were arranged individually in a circular pattern. Figure 9 shows an image of the matches in the box prior to testing. The matches were manufactured by Diamond Brand, Muncie, IN. The matches were ignited at their set location on the carpet sample using a butane lighter as seen in Figure 10.



Figure 8. Stick Matches Placed on Carpet (193886_793157.jpg)



Figure 9. Stick Matches (193886_793149.jpg)



Figure 10. Ignition of Stick Matches (193886_793162.jpg)

Butane Lighter

The fourth ignition device was a butane lighter. The lighter used for this testing was manufactured by Scripto, as shown in Figure 11. As seen in Figure 12, the lighter's flame was applied directly to the surface of the carpet.



Figure 11. Butane Lighter (193893_793335.jpg)



Figure 12. Spot Exposure Using Butane Lighter (193892_793303.jpg)

Propane Torch

The fourth ignition device was a propane torch. The model of torch used, as seen in Figure 13, was Worthington Pro Grade Propane (UPC # 14045-10182). As seen in Figure 14, the torch's flame was applied directly to the surface of the carpet in multiple locations.



Figure 13. Propane Torch(193896_793414.jpg)



Figure 14. Propane Torch Applied to Carpet Surface (193896_793443.jpg)

Isopropyl alcohol

In ten (10) experiments, isopropyl alcohol was poured onto the carpet prior to ignition. As shown in Figure 15, Walgreens 91% Isopropyl Alcohol (UPC: 11917-12266) was used for this testing.



Figure 15. 91% Isopropyl Alcohol (203902_803633.jpg)

Experiment Details

Test Matrix

Table 2 summarizes the 34 experiments conducted during the test series. The carpet sample, ignition device and the presence of liquid fuel were varied during the experiments.

Table 2. Summary of tests conducted

Test No.	Experiment ID	Carpet Sample	Carpet Square Dimension	Ignition Device	Liquid Fuel
1	193874	A -1	91cm (36in)	Cigarette	NA
2	193879	B-1	91cm (36in)	Cigarette	NA
3	193880	D-1	91cm (36in)	Cigarette	NA
4	193881	E-1	91cm (36in)	Cigarette	NA
5	193882	A-2	91cm (36in)	Paper Match	NA
6	193883	B-2	91cm (36in)	Paper Match	NA
7	193884	D-2	91cm (36in)	Paper Match	NA
8	193885	E-2	91cm (36in)	Paper Match	NA
9	193886	A-3	91cm (36in)	Stick Match	NA
10	193887	B-3	91cm (36in)	Stick Match	NA
11	193888	D-3	91cm (36in)	Stick Match	NA
12	193890	E-3	91cm (36in)	Stick Match	NA
13	193892	A-4	91cm (36in)	Lighter	NA
14	193893	B-4	91cm (36in)	Lighter	NA
15	193894	D-4	91cm (36in)	Lighter	NA
16	193895	E-4	91cm (36in)	Lighter	NA
17	193896	A-5	91cm (36in)	Propane Torch	NA
18	193897	B-5	91cm (36in)	Propane Torch	NA
19	193898	D-5	91cm (36in)	Propane Torch	NA
20	193899	E-5	91cm (36in)	Propane Torch	NA
21	203898	A-6	61cm (24in)	Propane Torch	NA
22	203899	B-6	61cm (24in)	Propane Torch	NA
23	203900	D-6	61cm (24in)	Propane Torch	NA
24	203901	E-6	61cm (24in)	Propane Torch	NA
25	203902	A-7	91cm (36in)	Propane Torch	Isopropyl Alcohol
26	203903	A-8	91cm (36in)	Propane Torch	Isopropyl Alcohol
27	203904	B-7	91cm (36in)	Propane Torch	Isopropyl Alcohol
28	203905	D-7	91cm (36in)	Propane Torch	Isopropyl Alcohol
29	203906	E-7	91cm (36in)	Propane Torch	Isopropyl Alcohol
30	203907	A-9	61cm (24in)	Propane Torch	Isopropyl Alcohol
31	203908	B-9	61cm (24in)	Propane Torch	Isopropyl Alcohol

32	203909	D-9	61cm (24in)	Propane Torch	Isopropyl Alcohol
33	203910	E-9	61cm (24in)	Propane Torch	Isopropyl Alcohol
34	203911	A-10	61cm (24in)	Propane Torch	Isopropyl Alcohol

Test Procedure

The following sections describe the testing procedure for each ignition scenario.

Cigarette Ignition

Prior to the start of the test, each of the eight (8) cigarettes used were ignited using the apparatus shown in Figure 3, which provided a continuous draw of air through the cigarette as a lighter was held over the end. The ignited cigarettes were removed from the ignition apparatus and placed on the carpet in the configuration shown in Figure 4. Tests were continued until ignition of the carpet, or self-extinguishment of the cigarettes.

Match Ignition

Eight (8) experiments used matches as the ignition source. Four (4) experiments used paper matches and four (4) experiments used stick matches, as an ignition source. During each experiment, eight (8) matches were placed on the carpet in the configuration shown in Figure 8. The base of each match was pushed down in the carpet to allow for ignition of the match heads using a butane lighter. Ignition of a match is shown in Figure 10. Tests were continued until ignition of the carpet, or self-extinguishment of the matches.

Lighter Ignition

During four (4) experiments using a butane lighter as an ignition source, the lighter was applied to the carpet in three primary patterns for predetermined lengths of time. The lighter was held on a spot at the surface of the carpet for approximately 30 seconds. Then, the lighter was moved to an unburned section of carpet and moved back and forth across an area of the carpet surface approximately 4 cm (1.5 in) wide for approximately one minute. Lastly, the lighter was moved in a straight line across the middle of the carpet sample over a period of approximately one minute. Tests were terminated at the end of the routine. It should be noted, that during Experiment 193892, the lighter was held in on a second spot, prior to the line application, for approximately one minute. It should also be noted that in Experiment 193893, the lighter was held in an almost vertical orientation on a spot of carpet for approximately 15 seconds. Figure 16 shows the additional lighter application in Experiment 193893.

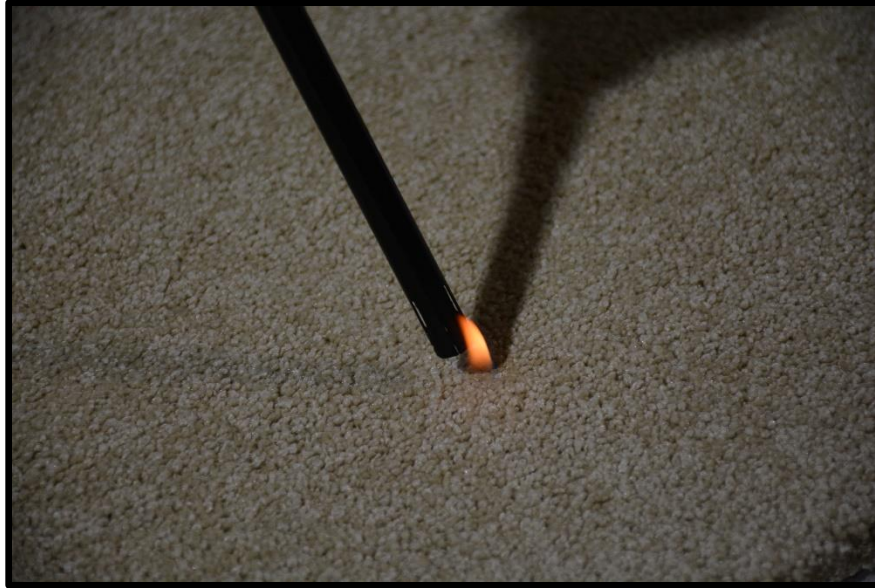


Figure 16. Vertical lighter orientation (193893_793343.jpg)

Torch Ignition

During eight (8) experiments using a propane torch as an ignition source, the ignited torch was applied to the carpet in patterns for predetermined lengths of time. During Experiments 193896, 193897, 193898 and 193899, the torch was held so that the tip of the torch flame was in contact with the surface of the carpet. This is shown in Figure 17.



Figure 17. Torch flame applied to carpet surface (193896_793422.jpg)

The patterns used during the four (4) experiments are listed below. Tests were terminated at the end of the routine.

1. Torch was held over the carpet in one location for 30 seconds.
2. Positioned over a new location on the carpet sample, the torch was moved left to right over an area of the carpet approximately 5-6 inches in length for 30 seconds.
3. Positioned over a new location on the carpet sample, the torch was moved across the middle of the sample in a line for an approximate 30 second period.
4. Positioned over a new location on the carpet sample, the torch was moved in a circular motion over an area approximately 12 inches in diameter for 60 seconds.

It should be noted that Experiment 193896 did not experience pattern 4, and that during Experiment 193899, pattern 4 was applied for 90 seconds.

During Experiments 203898, 203899, 203900 and 203901, the tip of the torch head was held at a height of 220mm (8.7 inches) above the surface of the carpet. This is shown in Figure 18.

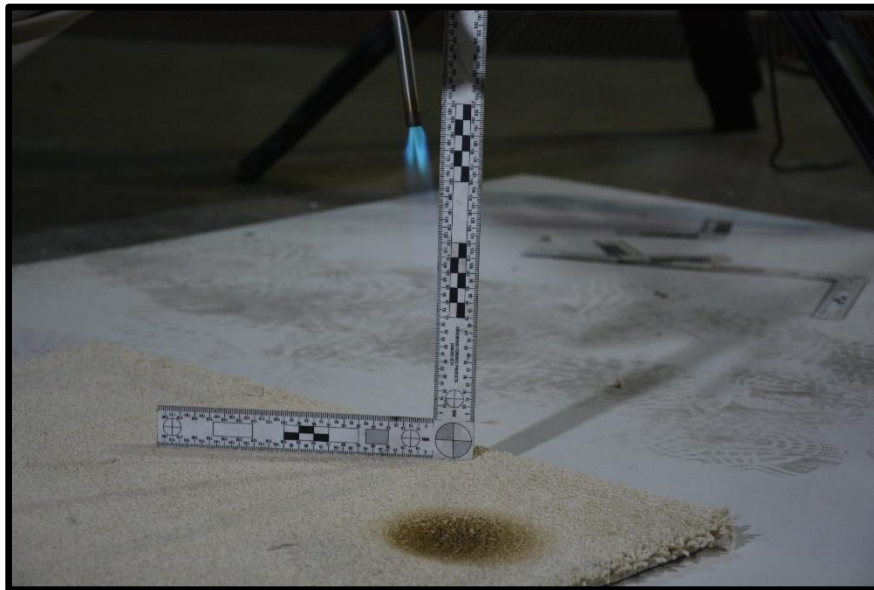


Figure 18. Torch flame held above carpet surface (203899_803551.jpg)

The patterns used during the four (4) experiments are listed below. Tests were terminated at the end of the routine.

1. Torch was held over the carpet in one location for 30 seconds.
2. Positioned over a new location on the carpet sample, the torch was moved in a circular motion over an area approximately 12 inches in diameter for 60 seconds.

Isopropyl Alcohol Ignition

In ten (10) experiments, isopropyl alcohol was poured on to the carpet prior to ignition. At the beginning of each test, a predetermined amount of isopropyl alcohol was measured using a graduated cylinder.

In Experiment 203902, prior to ignition, 50mL (1.7 oz) was poured in two locations, one on each half of the sample over a circular area of 2.5 cm to 5 cm (1 to 2 inches) in diameter. One of the pours was scrubbed into the carpet using a firm bristle brush. Each pour was then ignited using a propane torch and allowed to burn for 90 seconds. The flames were extinguished with a CO2 extinguisher. The test was terminated when the flames were extinguished.

Experiments 203903, 203904, 203905 and 203906 all followed the same procedure, and consisted of three individual burns. Prior to the first ignition, 50 mL (1.7 oz) was poured near a corner of the sample over a circular area of 2.5 cm to 5 cm (1 to 2 inches) in diameter. The alcohol was scrubbed into the carpet using a firm bristle brush. The pour was ignited using a propane torch and allowed to burn for a duration of 20 seconds. This procedure was repeated in two more locations on the carpet sample. The second location was allowed to burn for 40 seconds, and the third was allowed to burn for 60 seconds. The flames were extinguished with a CO2 extinguisher. The tests were terminated when the third burn was extinguished.

Experiments 203907, 203908, 203909, 203910 and 203911 all followed the same procedure. Prior to ignition, 100mL (3.4 oz) was poured in the center of the carpet sample in two separate pour patterns. In Experiment 203907, the two pours were made adjoining in a “V” pattern. In the remaining experiments, the two pours were made in parallel lines approximately 3 to 4 inches apart. In each experiment, both pour patterns were scrubbed into the carpet using a firm bristle brush. After scrubbing the alcohol pour in the carpet, both pour patterns were ignited and allowed to burn for 30 seconds. The flames were extinguished with a CO2 extinguisher. The tests were terminated when the flames were extinguished.

Instrumentation

The experiments were documented using digital photography and videos.

Laboratory Conditions

The ambient laboratory temperature, barometric pressure, and relative humidity were measured during the experiment(s). The laboratory conditions were measured using an industrial probe and microserver. The probe measures the ambient conditions using capacitive digital sensors. The sensor probe has surface mounted circuitry which responds to changes in the environment and outputs a digital signal. The Laboratory Conditions were measured in accordance with the method defined in FRL Laboratory Instruction “LI017 Laboratory Conditions” [1].

The following table provides a description of the instrumentation used to collect the ambient laboratory conditions measurements during the experiments.

Table 3. Lab Conditions Description

Experiment ID	Description	Manufacturer	Model
193874	MBR_01	OMEGA	IBTHP-5
193879	MBR_01	OMEGA	IBTHP-5
193880	MBR_01	OMEGA	IBTHP-5
193881	MBR_01	OMEGA	IBTHP-5
193882	MBR_01	OMEGA	IBTHP-5
193883	MBR_01	OMEGA	IBTHP-5
193884	MBR_01	OMEGA	IBTHP-5
193885	MBR_01	OMEGA	IBTHP-5
193886	MBR_01	OMEGA	IBTHP-5
193887	MBR_01	OMEGA	IBTHP-5
193888	MBR_01	OMEGA	IBTHP-5
193890	MBR_01	OMEGA	IBTHP-5
193892	MBR_01	OMEGA	IBTHP-5
193893	MBR_01	OMEGA	IBTHP-5
193894	MBR_01	OMEGA	IBTHP-5
193895	MBR_01	OMEGA	IBTHP-5
193896	MBR_01	OMEGA	IBTHP-5
193897	MBR_01	OMEGA	IBTHP-5
193898	MBR_01	OMEGA	IBTHP-5
193899	MBR_01	OMEGA	IBTHP-5
203898	MBR_01	OMEGA	IBTHP-5
203899	MBR_01	OMEGA	IBTHP-5
203900	MBR_01	OMEGA	IBTHP-5
203901	MBR_01	OMEGA	IBTHP-5
203902	MBR_01	OMEGA	IBTHP-5
203903	MBR_01	OMEGA	IBTHP-5
203904	MBR_01	OMEGA	IBTHP-5
203905	MBR_01	OMEGA	IBTHP-5
203906	MBR_01	OMEGA	IBTHP-5
203907	MBR_01	OMEGA	IBTHP-5
203908	MBR_01	OMEGA	IBTHP-5
203909	MBR_01	OMEGA	IBTHP-5
203910	MBR_01	OMEGA	IBTHP-5
203911	MBR_01	OMEGA	IBTHP-5

The following table provides a summary of the initial conditions at the start of the experiment(s).

Table 4. Ambient Laboratory Condition Summary

Experiment ID	Description	Initial Temperature (C)	Initial Pressure (kPa)	Initial Relative Humidity (%)
193874	MBR_01	24	101	39
193879	MBR_01	25	100	44
193880	MBR_01	25	100	44
193881	MBR_01	25	100	44
193882	MBR_01	24	101	53
193883	MBR_01	24	101	54
193884	MBR_01	23	101	54
193885	MBR_01	23	101	55
193886	MBR_01	23	101	56
193887	MBR_01	23	101	56
193888	MBR_01	23	101	55
193890	MBR_01	24	100	47
193892	MBR_01	23	101	55
193893	MBR_01	23	101	52
193894	MBR_01	23	101	52
193895	MBR_01	23	101	52
193896	MBR_01	23	101	52
193897	MBR_01	23	101	52
193898	MBR_01	23	101	52
193899	MBR_01	23	101	52
203898	MBR_01	23	101	52
203899	MBR_01	23	101	49
203900	MBR_01	23	101	49
203901	MBR_01	23	101	49
203902	MBR_01	23	101	49
203903	MBR_01	23	101	48
203904	MBR_01	23	101	47
203905	MBR_01	23	101	46
203906	MBR_01	23	101	45
203907	MBR_01	23	101	45
203908	MBR_01	24	101	44
203909	MBR_01	24	101	44
203910	MBR_01	24	101	44
203911	MBR_01	24	101	43

Experiment Photographs

Digital Cameras are used within the FRL to record digital still photographs during experiments. Digital Cameras used during this test series were used in accordance with the method defined in FRL Laboratory Instruction “LI003 Digital Cameras” [2]

Results for Test 1 (ID 193874)

The following table provides a description of the video(s) taken during this experiment.

Table 5. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	02:08:54	1216	193874_20170606_140854_15.mov
MASTER			193874_959998.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 19. Pre test 15 minutes
(193874_792741)



Figure 20. Pre test 15 minutes
(193874_792742)



Figure 21. Pre test 14 minutes
(193874_792743)



Figure 22. Pre test 14 minutes
(193874_792744)



Figure 23. Pre test 14 minutes
(193874_792745)



Figure 24. Pre test 14 minutes
(193874_792746)



Figure 25. Pre test 13 minutes
(193874_792747)



Figure 26. Pre test 13 minutes
(193874_792748)



Figure 27. Pre test 13 minutes
(193874_792749)



Figure 28. Pre test 13 minutes
(193874_792750)



Figure 29. Pre test 13 minutes
(193874_792751)

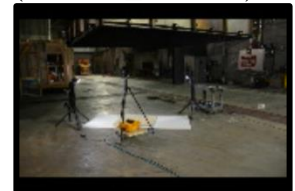


Figure 30. Pre test 13 minutes
(193874_792752)



Figure 31. Pre test 13 minutes
(193874_792753)



Figure 32. Pre test 13 minutes
(193874_792754)



Figure 33. Pre test 12 minutes
(193874_792755)



Figure 34. Pre test 12 minutes
(193874_792756)



Figure 35. Pre test 12 minutes
(193874_792757)



Figure 36. Pre test 12 minutes
(193874_792758)



Figure 37. Pre test 12 minutes
(193874_792759)



Figure 38. Pre test 2 minutes
(193874_792760)



Figure 39. Pre test 2 minutes
(193874_792761)



Figure 40. Pre test 2 minutes
(193874_792762)



Figure 41. Pre test 2 minutes
(193874_792763)



Figure 42. Pre test 92 seconds
(193874_792764)



Figure 43. Pre test 90 seconds
(193874_792765)



Figure 44. Pre test 84 seconds
(193874_792766)



Figure 45. Pre test 82 seconds
(193874_792767)



Figure 46. Pre test 72 seconds
(193874_792768)



Figure 47. Pre test 68 seconds
(193874_792769)



Figure 48. Pre test 50 seconds
(193874_792770)



Figure 49. Pre test 14 seconds
(193874_792771)



Figure 50. 34 seconds
(193874_792772)



Figure 51. 40 seconds
(193874_792773)



Figure 52. 60 seconds
(193874_792774)



Figure 53. 62 seconds
(193874_792775)



Figure 54. 68 seconds
(193874_792776)



Figure 55. 78 seconds
(193874_792777)



Figure 56. 84 seconds
(193874_792778)



Figure 57. 94 seconds
(193874_792779)



Figure 58. 102 seconds
(193874_792780)



Figure 59. 128 seconds
(193874_792781)



Figure 60. 140 seconds
(193874_792782)



Figure 61. 146 seconds
(193874_792783)



Figure 62. 152 seconds
(193874_792784)



Figure 63. 170 seconds
(193874_792785)



Figure 64. 182 seconds
(193874_792786)



Figure 65. 214 seconds
(193874_792787)



Figure 66. 220 seconds
(193874_792788)

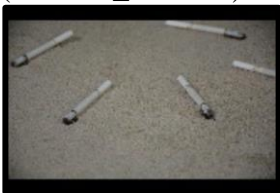


Figure 67. 236 seconds
(193874_792789)



Figure 68. 632 seconds
(193874_792790)



Figure 69. 636 seconds
(193874_792791)



Figure 70. 638 seconds
(193874_792792)



Figure 71. 640 seconds
(193874_792793)



Figure 72. 644 seconds
(193874_792794)



Figure 73. 662 seconds
(193874_792795)



Figure 74. 666 seconds
(193874_792796)



Figure 75. 672 seconds
(193874_792797)



Figure 76. Post test 2 minutes
(193874_792798)



Figure 77. Post test 2 minutes
(193874_792799)



Figure 78. Post test 2 minutes
(193874_792800)



Figure 79. Post test 2 minutes
(193874_792801)



Figure 80. Post test 2 minutes
(193874_792802)



Figure 81. Post test 2 minutes
(193874_792803)



Figure 82. Post test 2 minutes
(193874_792804)



Figure 83. Post test 2 minutes
(193874_792805)



Figure 84. Post test 2 minutes
(193874_792806)



Figure 85. Post test 2 minutes
(193874_792807)



Figure 86. Post test 3 minutes
(193874_792808)



Figure 87. Post test 3 minutes
(193874_792809)



Figure 88. Post test 4 minutes
(193874_792810)



Figure 89. Post test 4 minutes
(193874_792811)



Figure 90. Post test 4 minutes
(193874_792812)



Figure 91. Post test 4 minutes (193874_792813)



Figure 92. Post test 4 minutes (193874_792814)



Figure 93. Post test 4 minutes (193874_792815)



Figure 94. Post test 4 minutes (193874_792816)



Figure 95. Post test 4 minutes (193874_792817)



Figure 96. Post test 4 minutes (193874_792818)



Figure 97. Post test 4 minutes (193874_792819)



Figure 98. Post test 5 minutes (193874_792820)



Figure 99. Post test 5 minutes (193874_792821)



Figure 100. Post test 5 minutes (193874_792822)



Figure 101. Post test 5 minutes (193874_792823)



Figure 102. Post test 6 minutes (193874_792824)



Figure 103. Post test 6 minutes (193874_792825)



Figure 104. Post test 6 minutes (193874_792826)



Figure 105. Post test 6 minutes (193874_792827)



Figure 106. Post test 6 minutes (193874_792828)



Figure 107. Post test 6 minutes (193874_792829)



Figure 108. Post test 8 minutes (193874_792830)



Figure 109. Post test 8 minutes (193874_792831)



Figure 110. Post test 8 minutes (193874_792832)



Figure 111. Post test
8 minutes
(193874_792833)



Figure 112. Post test
8 minutes
(193874_792834)

Results for Test 2 (ID 193879)

The following table provides a description of the video(s) taken during this experiment.

Table 6. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	02:48:41	1251	193879_20170606_144841_15.mov
MASTER			193879_959996.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 113. Pre test 3 minutes
(193879_792841)

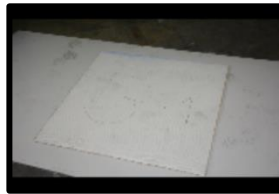


Figure 114. Pre test 3 minutes
(193879_792842)



Figure 115. Pre test 2 minutes
(193879_792843)



Figure 116. Pre test 2 minutes
(193879_792844)



Figure 117. Pre test 2 minutes
(193879_792845)



Figure 118. Pre test 87 seconds
(193879_792846)



Figure 119. Pre test 83 seconds
(193879_792847)



Figure 120. Pre test 80 seconds
(193879_792848)



Figure 121. Pre test 76 seconds
(193879_792849)



Figure 122. Pre test 49 seconds
(193879_792850)



Figure 123. Pre test 46 seconds
(193879_792851)



Figure 124. Pre test 31 seconds
(193879_792852)



Figure 125. Pre test
22 seconds
(193879_792853)



Figure 126. 37
seconds
(193879_792854)



Figure 127. 40
seconds
(193879_792855)



Figure 128. 46
seconds
(193879_792856)



Figure 129. 51
seconds
(193879_792857)



Figure 130. 57
seconds
(193879_792858)



Figure 131. 241
seconds
(193879_792859)



Figure 132. 243
seconds
(193879_792860)



Figure 133. 305
seconds
(193879_792861)



Figure 134. 307
seconds
(193879_792862)



Figure 135. 311
seconds
(193879_792863)



Figure 136. 737
seconds
(193879_792864)



Figure 137. 741
seconds
(193879_792865)



Figure 138. 745
seconds
(193879_792866)



Figure 139. 747
seconds
(193879_792867)



Figure 140. 769
seconds
(193879_792868)



Figure 141. Post test
1 minutes
(193879_792869)



Figure 142. Post test
1 minutes
(193879_792870)



Figure 143. Post test
1 minutes
(193879_792871)



Figure 144. Post test
1 minutes
(193879_792872)



Figure 145. Post test
1 minutes
(193879_792873)



Figure 146. Post test
1 minutes
(193879_792874)



Figure 147. Post test
1 minutes
(193879_792875)



Figure 148. Post test
2 minutes
(193879_792876)



Figure 149. Post test
2 minutes
(193879_792877)



Figure 150. Post test
2 minutes
(193879_792878)



Figure 151. Post test
2 minutes
(193879_792879)



Figure 152. Post test
2 minutes
(193879_792880)



Figure 153. Post test
2 minutes
(193879_792881)



Figure 154. Post test
2 minutes
(193879_792882)



Figure 155. Post test
2 minutes
(193879_792883)



Figure 156. Post test
2 minutes
(193879_792884)



Figure 157. Post test
3 minutes
(193879_792885)



Figure 158. Post test
3 minutes
(193879_792886)



Figure 159. Post test
3 minutes
(193879_792887)



Figure 160. Post test
3 minutes
(193879_792888)



Figure 161. Post test
3 minutes
(193879_792889)



Figure 162. Post test
3 minutes
(193879_792890)

Results for Test 3 (ID 193880)

The following table provides a description of the video(s) taken during this experiment.

Table 7. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	03:18:27	1222	193880_20170606_151827_15.mov
MASTER			193880_959999.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.

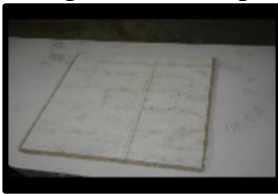


Figure 163. Pre test 2 minutes
(193880_792892)



Figure 164. Pre test 2 minutes
(193880_792893)



Figure 165. Pre test 118 seconds
(193880_792894)



Figure 166. Pre test 115 seconds
(193880_792895)

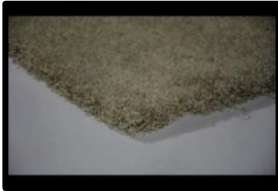


Figure 167. Pre test 110 seconds
(193880_792896)



Figure 168. Pre test 107 seconds
(193880_792897)

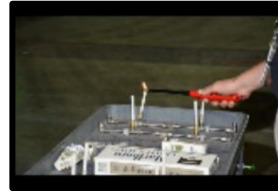


Figure 169. Pre test 91 seconds
(193880_792898)



Figure 170. Pre test 85 seconds
(193880_792899)

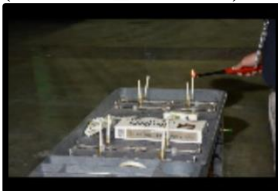


Figure 171. Pre test 81 seconds
(193880_792900)

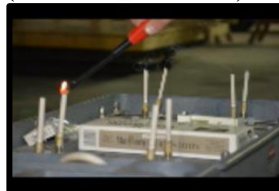


Figure 172. Pre test 58 seconds
(193880_792901)



Figure 173. Pre test 48 seconds
(193880_792902)



Figure 174. 28 seconds
(193880_792903)



Figure 175. 31 seconds
(193880_792904)



Figure 176. 42 seconds
(193880_792905)



Figure 177. 47 seconds
(193880_792906)



Figure 178. 49 seconds
(193880_792907)



Figure 179. 58 seconds
(193880_792908)

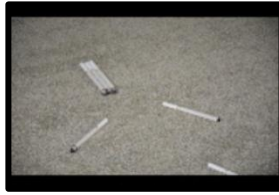


Figure 180. 62 seconds
(193880_792909)



Figure 181. 79 seconds
(193880_792910)



Figure 182. Post test 1 minutes
(193880_792911)



Figure 183. Post test 1 minutes
(193880_792912)



Figure 184. Post test 1 minutes
(193880_792913)



Figure 185. Post test 1 minutes
(193880_792914)

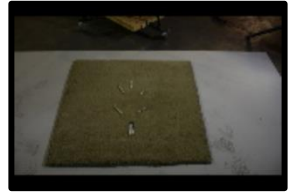


Figure 186. Post test 1 minutes
(193880_792915)



Figure 187. Post test 1 minutes
(193880_792916)



Figure 188. Post test 1 minutes
(193880_792917)



Figure 189. Post test 2 minutes
(193880_792918)



Figure 190. Post test 2 minutes
(193880_792919)



Figure 191. Post test 2 minutes
(193880_792920)



Figure 192. Post test 2 minutes
(193880_792921)



Figure 193. Post test 2 minutes
(193880_792922)



Figure 194. Post test 2 minutes
(193880_792923)



Figure 195. Post test
3 minutes
(193880_792924)



Figure 196. Post test
3 minutes
(193880_792925)



Figure 197. Post test
3 minutes
(193880_792926)



Figure 198. Post test
3 minutes
(193880_792927)



Figure 199. Post test
3 minutes
(193880_792928)



Figure 200. Post test
3 minutes
(193880_792929)

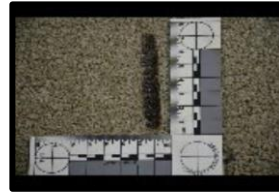


Figure 201. Post test
3 minutes
(193880_792930)



Figure 202. Post test
4 minutes
(193880_792931)

Results for Test 4 (ID 193881)

The following table provides a description of the video(s) taken during this experiment.

Table 8. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	09:25:20	1227	193881_20170607_092520_15.mov
Master			193881_962593.MOV

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 203. Pre test
23 minutes
(193881_792938)



Figure 204. Pre test
22 minutes
(193881_792939)



Figure 205. Pre test
22 minutes
(193881_792940)



Figure 206. Pre test
22 minutes
(193881_792941)



Figure 207. Pre test
22 minutes
(193881_792942)



Figure 208. Pre test
21 minutes
(193881_792943)



Figure 209. Pre test
21 minutes
(193881_792944)



Figure 210. Pre test
21 minutes
(193881_792945)



Figure 211. Pre test
21 minutes
(193881_792946)



Figure 212. Pre test
21 minutes
(193881_792947)



Figure 213. Pre test
21 minutes
(193881_792948)



Figure 214. Pre test
20 minutes
(193881_792949)



Figure 215. Pre test 20 minutes (193881_792950)



Figure 216. Pre test 20 minutes (193881_792951)



Figure 217. Pre test 91 seconds (193881_792952)



Figure 218. Pre test 85 seconds (193881_792953)



Figure 219. Pre test 67 seconds (193881_792954)

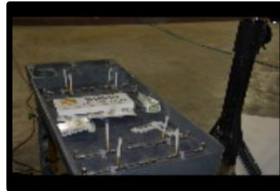


Figure 220. Pre test 19 seconds (193881_792955)



Figure 221. Pre test 13 seconds (193881_792956)



Figure 222. 23 seconds (193881_792957)

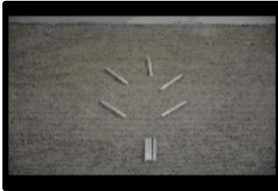


Figure 223. 25 seconds (193881_792958)



Figure 224. 35 seconds (193881_792959)



Figure 225. 37 seconds (193881_792960)



Figure 226. 45 seconds (193881_792961)



Figure 227. 47 seconds (193881_792962)



Figure 228. 61 seconds (193881_792963)



Figure 229. 645 seconds (193881_792964)



Figure 230. 651 seconds (193881_792965)



Figure 231. 657 seconds (193881_792966)



Figure 232. 661 seconds (193881_792967)



Figure 233. 669 seconds (193881_792968)



Figure 234. 679 seconds (193881_792969)



Figure 235. 685 seconds
(193881_792970)



Figure 236. 833 seconds
(193881_792971)



Figure 237. 841 seconds
(193881_792972)



Figure 238. 845 seconds
(193881_792973)



Figure 239. 861 seconds
(193881_792974)



Figure 240. Post test 0 minutes
(193881_792975)



Figure 241. Post test 0 minutes
(193881_792976)



Figure 242. Post test 0 minutes
(193881_792977)



Figure 243. Post test 0 minutes
(193881_792978)



Figure 244. Post test 0 minutes
(193881_792979)



Figure 245. Post test 0 minutes
(193881_792980)

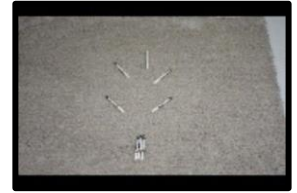


Figure 246. Post test 1 minutes
(193881_792981)



Figure 247. Post test 1 minutes
(193881_792982)



Figure 248. Post test 1 minutes
(193881_792983)



Figure 249. Post test 1 minutes
(193881_792984)



Figure 250. Post test 1 minutes
(193881_792985)



Figure 251. Post test 1 minutes
(193881_792986)



Figure 252. Post test 1 minutes
(193881_792987)



Figure 253. Post test 1 minutes
(193881_792988)



Figure 254. Post test 1 minutes
(193881_792989)



Figure 255. Post test
2 minutes
(193881_792990)



Figure 256. Post test
2 minutes
(193881_792991)



Figure 257. Post test
2 minutes
(193881_792992)



Figure 258. Post test
2 minutes
(193881_792993)



Figure 259. Post test
2 minutes
(193881_792994)

Results for Test 5 (ID 193882)

The following table provides a description of the video(s) taken during this experiment.

Table 9. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	10:00:23	142	193882_20170607_100023_15.mov
MASTER			193882_960272.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 260. Pre test 3 minutes
(193882_792998)



Figure 261. Pre test 2 minutes
(193882_792999)



Figure 262. Pre test 2 minutes
(193882_793000)



Figure 263. Pre test 2 minutes
(193882_793001)



Figure 264. Pre test 2 minutes
(193882_793002)



Figure 265. Pre test 2 minutes
(193882_793003)



Figure 266. Pre test 103 seconds
(193882_793004)



Figure 267. Pre test 101 seconds
(193882_793005)



Figure 268. Pre test 73 seconds
(193882_793006)

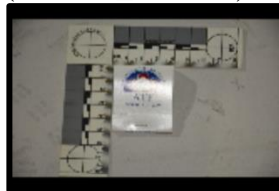


Figure 269. Pre test 69 seconds
(193882_793007)

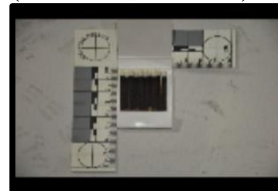


Figure 270. Pre test 57 seconds
(193882_793008)

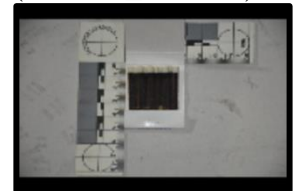


Figure 271. Pre test 53 seconds
(193882_793009)



Figure 272. Pre test
25 seconds
(193882_793010)



Figure 273. 5 seconds
(193882_793011)



Figure 274. 9 seconds
(193882_793012)



Figure 275. 13
seconds
(193882_793013)



Figure 276. 15
seconds
(193882_793014)



Figure 277. 19
seconds
(193882_793015)



Figure 278. 23
seconds
(193882_793016)



Figure 279. 23
seconds
(193882_793017)



Figure 280. 27
seconds
(193882_793018)



Figure 281. 33
seconds
(193882_793019)



Figure 282. 39
seconds
(193882_793020)



Figure 283. 55
seconds
(193882_793021)



Figure 284. 57
seconds
(193882_793022)



Figure 285. 65
seconds
(193882_793023)

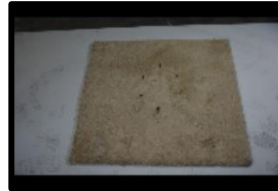


Figure 286. Post test
0 minutes
(193882_793024)



Figure 287. Post test
0 minutes
(193882_793025)



Figure 288. Post test
1 minutes
(193882_793026)

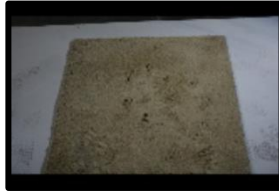


Figure 289. Post test
2 minutes
(193882_793027)



Figure 290. Post test
2 minutes
(193882_793028)



Figure 291. Post test
2 minutes
(193882_793029)



Figure 292. Post test
2 minutes
(193882_793030)



Figure 293. Post test
3 minutes
(193882_793031)



Figure 294. Post test
3 minutes
(193882_793032)



Figure 295. Post test
3 minutes
(193882_793033)



Figure 296. Post test
3 minutes
(193882_793034)



Figure 297. Post test
3 minutes
(193882_793035)

Results for Test 6 (ID 193883)

The following table provides a description of the video(s) taken during this experiment.

Table 10. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	10:15:45	142	193883_20170607_101545_15.mov
MASTER			193883_960273.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 298. Pre test 5 minutes
(193883_793039)



Figure 299. Pre test 5 minutes
(193883_793040)



Figure 300. Pre test 4 minutes
(193883_793041)



Figure 301. Pre test 3 minutes
(193883_793042)



Figure 302. Pre test 3 minutes
(193883_793043)



Figure 303. Pre test 3 minutes
(193883_793044)



Figure 304. Pre test 3 minutes
(193883_793045)



Figure 305. Pre test 3 minutes
(193883_793046)



Figure 306. 3 seconds
(193883_793047)



Figure 307. 7 seconds
(193883_793048)



Figure 308. 11 seconds
(193883_793049)



Figure 309. 15 seconds
(193883_793050)



Figure 310. 17 seconds
(193883_793051)



Figure 311. 23 seconds
(193883_793052)



Figure 312. 31 seconds
(193883_793053)



Figure 313. 39 seconds
(193883_793054)



Figure 314. 49 seconds
(193883_793055)



Figure 315. 53 seconds
(193883_793056)



Figure 316. 67 seconds
(193883_793057)



Figure 317. 73 seconds
(193883_793058)



Figure 318. Post test 1 minutes
(193883_793059)



Figure 319. Post test 1 minutes
(193883_793060)

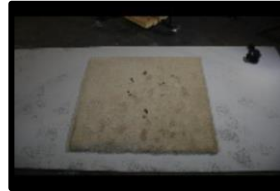


Figure 320. Post test 2 minutes
(193883_793061)



Figure 321. Post test 2 minutes
(193883_793062)



Figure 322. Post test 2 minutes
(193883_793063)



Figure 323. Post test 2 minutes
(193883_793064)



Figure 324. Post test 2 minutes
(193883_793065)



Figure 325. Post test 2 minutes
(193883_793066)



Figure 326. Post test 3 minutes
(193883_793067)



Figure 327. Post test 3 minutes
(193883_793068)



Figure 328. Post test 3 minutes
(193883_793069)



Figure 329. Post test 3 minutes
(193883_793070)



Figure 330. Post test
4 minutes
(193883_793071)



Figure 331. Post test
4 minutes
(193883_793072)

Results for Test 7 (ID 193884)

The following table provides a description of the video(s) taken during this experiment.

Table 11. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	10:28:07	167	193884_20170607_102807_15.mov
MASTER			193884_960002.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 332. Pre test 3 minutes
(193884_793076)



Figure 333. Pre test 2 minutes
(193884_793077)



Figure 334. Pre test 2 minutes
(193884_793078)



Figure 335. Pre test 2 minutes
(193884_793079)



Figure 336. Pre test 98 seconds
(193884_793080)



Figure 337. Pre test 66 seconds
(193884_793081)



Figure 338. Pre test 64 seconds
(193884_793082)



Figure 339. Pre test 22 seconds
(193884_793083)

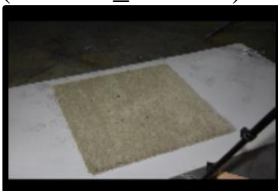


Figure 340. Pre test 18 seconds
(193884_793084)

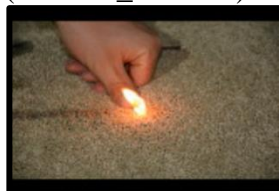


Figure 341. 4 seconds
(193884_793085)

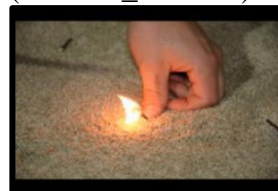


Figure 342. 12 seconds
(193884_793086)

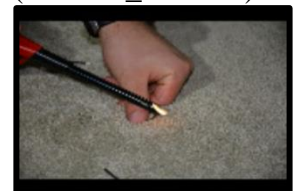


Figure 343. 20 seconds
(193884_793087)



Figure 344. 26 seconds
(193884_793088)



Figure 345. 32 seconds
(193884_793089)



Figure 346. 38 seconds
(193884_793090)



Figure 347. 46 seconds
(193884_793091)



Figure 348. 48 seconds
(193884_793092)



Figure 349. 50 seconds
(193884_793093)



Figure 350. 76 seconds
(193884_793094)



Figure 351. 82 seconds
(193884_793095)

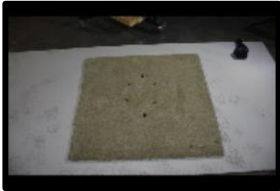


Figure 352. Post test 1 minutes
(193884_793096)



Figure 353. Post test 1 minutes
(193884_793097)

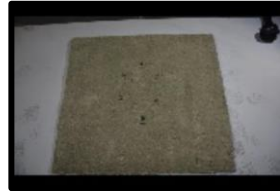


Figure 354. Post test 1 minutes
(193884_793098)



Figure 355. Post test 1 minutes
(193884_793099)



Figure 356. Post test 2 minutes
(193884_793100)



Figure 357. Post test 2 minutes
(193884_793101)

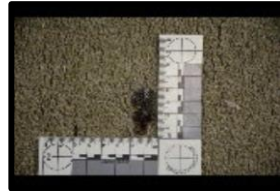


Figure 358. Post test 2 minutes
(193884_793102)



Figure 359. Post test 2 minutes
(193884_793103)



Figure 360. Post test 2 minutes
(193884_793104)



Figure 361. Post test 2 minutes
(193884_793105)

Results for Test 8 (ID 193885)

The following table provides a description of the video(s) taken during this experiment.

Table 12. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	10:39:04	136	193885_20170607_103904_15.mov
MASTER			193885_960274.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 362. Pre test 110 seconds
(193885_793109)



Figure 363. Pre test 84 seconds
(193885_793110)



Figure 364. Pre test 74 seconds
(193885_793111)

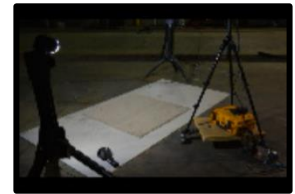


Figure 365. Pre test 72 seconds
(193885_793112)



Figure 366. Pre test 66 seconds
(193885_793113)



Figure 367. Pre test 62 seconds
(193885_793114)



Figure 368. Pre test 56 seconds
(193885_793115)



Figure 369. Pre test 24 seconds
(193885_793116)



Figure 370. Pre test 22 seconds
(193885_793117)



Figure 371. Pre test 14 seconds
(193885_793118)



Figure 372. Pre test 2 seconds
(193885_793119)



Figure 373. 8 seconds
(193885_793120)



Figure 374. 16 seconds
(193885_793121)



Figure 375. 18 seconds
(193885_793122)



Figure 376. 20 seconds
(193885_793123)



Figure 377. 26 seconds
(193885_793124)



Figure 378. 32 seconds
(193885_793125)



Figure 379. 38 seconds
(193885_793126)



Figure 380. 56 seconds
(193885_793127)



Figure 381. 60 seconds
(193885_793128)



Figure 382. 102 seconds
(193885_793129)



Figure 383. 104 seconds
(193885_793130)

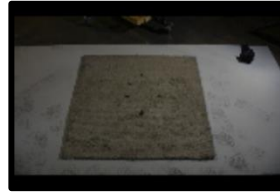


Figure 384. Post test 0 minutes
(193885_793131)



Figure 385. Post test 0 minutes
(193885_793132)



Figure 386. Post test 0 minutes
(193885_793133)



Figure 387. Post test 1 minutes
(193885_793134)



Figure 388. Post test 1 minutes
(193885_793135)



Figure 389. Post test 1 minutes
(193885_793136)



Figure 390. Post test 1 minutes
(193885_793137)



Figure 391. Post test 1 minutes
(193885_793138)

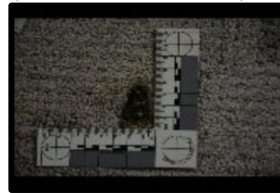


Figure 392. Post test 1 minutes
(193885_793139)



Figure 393. Post test 2 minutes
(193885_793140)



Figure 394. Post test
2 minutes
(193885_793141)



Figure 395. Post test
2 minutes
(193885_793142)



Figure 396. Post test
2 minutes
(193885_793143)

Results for Test 9 (ID 193886)

The following table provides a description of the video(s) taken during this experiment.

Table 13. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	10:52:05	182	193886_20170607_105205_15.mov
MASTER			193886_960004.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 397. Pre test 4 minutes
(193886_793147)



Figure 398. Pre test 4 minutes
(193886_793148)



Figure 399. Pre test 4 minutes
(193886_793149)

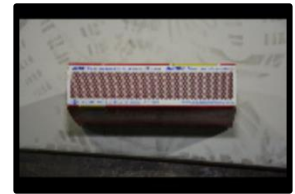


Figure 400. Pre test 4 minutes
(193886_793150)



Figure 401. Pre test 4 minutes
(193886_793151)



Figure 402. Pre test 4 minutes
(193886_793152)



Figure 403. Pre test 4 minutes
(193886_793153)



Figure 404. Pre test 64 seconds
(193886_793154)



Figure 405. Pre test 52 seconds
(193886_793155)



Figure 406. Pre test 48 seconds
(193886_793156)



Figure 407. Pre test 46 seconds
(193886_793157)

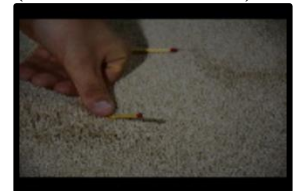


Figure 408. Pre test 2 seconds
(193886_793158)

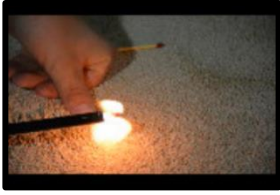


Figure 409. 6 seconds
(193886_793159)



Figure 410. 10 seconds
(193886_793160)



Figure 411. 14 seconds
(193886_793161)

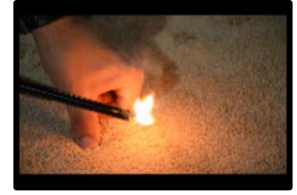


Figure 412. 24 seconds
(193886_793162)



Figure 413. 30 seconds
(193886_793163)



Figure 414. 34 seconds
(193886_793164)



Figure 415. 38 seconds
(193886_793165)



Figure 416. 46 seconds
(193886_793166)



Figure 417. 48 seconds
(193886_793167)



Figure 418. 58 seconds
(193886_793168)



Figure 419. 62 seconds
(193886_793169)



Figure 420. 66 seconds
(193886_793170)



Figure 421. 100 seconds
(193886_793171)



Figure 422. 102 seconds
(193886_793172)



Figure 423. 108 seconds
(193886_793173)



Figure 424. 142 seconds
(193886_793174)



Figure 425. Post test
0 minutes
(193886_793175)



Figure 426. Post test
0 minutes
(193886_793176)



Figure 427. Post test
0 minutes
(193886_793177)



Figure 428. Post test
0 minutes
(193886_793178)



Figure 429. Post test
2 minutes
(193886_793179)



Figure 430. Post test
2 minutes
(193886_793180)



Figure 431. Post test
2 minutes
(193886_793181)



Figure 432. Post test
2 minutes
(193886_793182)



Figure 433. Post test
2 minutes
(193886_793183)

Results for Test 10 (ID 193887)

The following table provides a description of the video(s) taken during this experiment.

Table 14. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	11:04:32	167	193887_20170607_110432_15.mov
MASTER			193887_960005.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 434. Pre test 2 minutes
(193887_793187)



Figure 435. Pre test 2 minutes
(193887_793188)



Figure 436. Pre test 97 seconds
(193887_793189)



Figure 437. Pre test 91 seconds
(193887_793190)



Figure 438. Pre test 85 seconds
(193887_793191)



Figure 439. Pre test 25 seconds
(193887_793192)



Figure 440. Pre test 19 seconds
(193887_793193)



Figure 441. Pre test 15 seconds
(193887_793194)

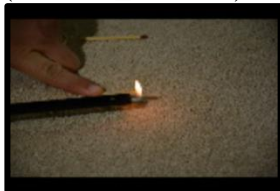


Figure 442. 3 seconds
(193887_793195)



Figure 443. 5 seconds
(193887_793196)



Figure 444. 13 seconds
(193887_793197)

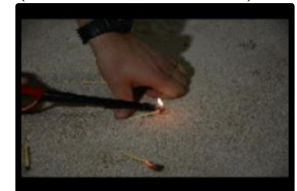


Figure 445. 23 seconds
(193887_793198)



Figure 446. 23 seconds
(193887_793199)



Figure 447. 33 seconds
(193887_793200)



Figure 448. 35 seconds
(193887_793201)



Figure 449. 43 seconds
(193887_793202)



Figure 450. 53 seconds
(193887_793203)



Figure 451. 55 seconds
(193887_793204)



Figure 452. 67 seconds
(193887_793205)



Figure 453. 69 seconds
(193887_793206)



Figure 454. 81 seconds
(193887_793207)



Figure 455. 121 seconds
(193887_793208)



Figure 456. 125 seconds
(193887_793209)



Figure 457. 147 seconds
(193887_793210)



Figure 458. 149 seconds
(193887_793211)



Figure 459. Post test 0 minutes
(193887_793212)



Figure 460. Post test 0 minutes
(193887_793213)



Figure 461. Post test 0 minutes
(193887_793214)



Figure 462. Post test 1 minutes
(193887_793215)



Figure 463. Post test 1 minutes
(193887_793216)



Figure 464. Post test 1 minutes
(193887_793217)



Figure 465. Post test 1 minutes
(193887_793218)

Results for Test 11 (ID 193888)

The following table provides a description of the video(s) taken during this experiment.

Table 15. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	11:14:39	261	193888_20170607_111439_15.mov
Master			193888_962594.MOV

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 466. Pre test 2 minutes
(193888_793225)



Figure 467. Pre test 119 seconds
(193888_793226)



Figure 468. Pre test 93 seconds
(193888_793227)



Figure 469. Pre test 85 seconds
(193888_793228)



Figure 470. Pre test 81 seconds
(193888_793229)



Figure 471. Pre test 75 seconds
(193888_793230)



Figure 472. Pre test 68 seconds
(193888_793231)

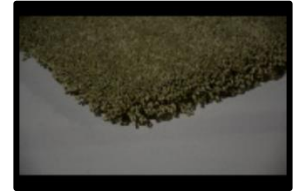


Figure 473. Pre test 48 seconds
(193888_793232)



Figure 474. Pre test 42 seconds
(193888_793233)

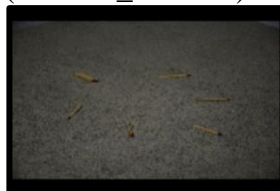


Figure 475. Pre test 40 seconds
(193888_793234)

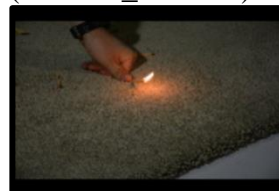


Figure 476. 18 seconds
(193888_793235)

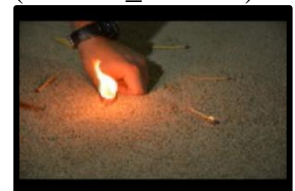


Figure 477. 30 seconds
(193888_793236)



Figure 478. 38 seconds
(193888_793237)



Figure 479. 46 seconds
(193888_793238)



Figure 480. 50 seconds
(193888_793239)



Figure 481. 52 seconds
(193888_793240)



Figure 482. 56 seconds
(193888_793241)



Figure 483. 60 seconds
(193888_793242)



Figure 484. 64 seconds
(193888_793243)



Figure 485. 90 seconds
(193888_793244)



Figure 486. 96 seconds
(193888_793245)



Figure 487. Post test 5 minutes
(193888_793246)



Figure 488. Post test 5 minutes
(193888_793247)



Figure 489. Post test 5 minutes
(193888_793248)



Figure 490. Post test 6 minutes
(193888_793249)



Figure 491. Post test 6 minutes
(193888_793250)



Figure 492. Post test 6 minutes
(193888_793251)



Figure 493. Post test 6 minutes
(193888_793252)



Figure 494. Post test 6 minutes
(193888_793253)



Figure 495. Post test 6 minutes
(193888_793254)

Results for Test 12 (ID 193890)

The following table provides a description of the video(s) taken during this experiment.

Table 16. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	11:38:54	171	193890_20170607_113854_15.mov
MASTER			193890_960276.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 496. Pre test 8 minutes
(193890_793261)



Figure 497. Pre test 8 minutes
(193890_793262)



Figure 498. Pre test 7 minutes
(193890_793263)



Figure 499. Pre test 7 minutes
(193890_793264)



Figure 500. Pre test 7 minutes
(193890_793265)



Figure 501. Pre test 7 minutes
(193890_793266)



Figure 502. Pre test 7 minutes
(193890_793267)



Figure 503. Pre test 12 seconds
(193890_793268)



Figure 504. 5 seconds
(193890_793269)



Figure 505. 12 seconds
(193890_793270)



Figure 506. 21 seconds
(193890_793271)

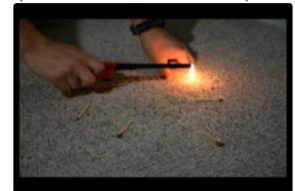


Figure 507. 27 seconds
(193890_793272)



Figure 508. 33 seconds
(193890_793273)



Figure 509. 43 seconds
(193890_793274)



Figure 510. 45 seconds
(193890_793275)



Figure 511. 63 seconds
(193890_793276)



Figure 512. 65 seconds
(193890_793277)



Figure 513. Post test 1 minutes
(193890_793278)



Figure 514. Post test 1 minutes
(193890_793279)



Figure 515. Post test 1 minutes
(193890_793280)



Figure 516. Post test 1 minutes
(193890_793281)



Figure 517. Post test 2 minutes
(193890_793282)



Figure 518. Post test 2 minutes
(193890_793283)

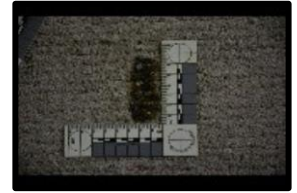


Figure 519. Post test 2 minutes
(193890_793284)

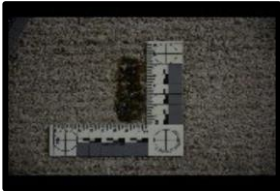


Figure 520. Post test 2 minutes
(193890_793285)



Figure 521. Post test 2 minutes
(193890_793286)



Figure 522. Post test 2 minutes
(193890_793287)

Results for Test 13 (ID 193892)

The following table provides a description of the video(s) taken during this experiment.

Table 17. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	01:25:36	262	193892_20170607_132536_15.mov
MASTER			193892_960277.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 523. Pre test 2 minutes
(193892_793291)



Figure 524. Pre test 49 seconds
(193892_793292)



Figure 525. Pre test 43 seconds
(193892_793293)



Figure 526. Pre test 41 seconds
(193892_793294)



Figure 527. Pre test 37 seconds
(193892_793295)



Figure 528. Pre test 33 seconds
(193892_793296)



Figure 529. 3 seconds
(193892_793297)



Figure 530. 7 seconds
(193892_793298)



Figure 531. 13 seconds
(193892_793299)



Figure 532. 21 seconds
(193892_793300)



Figure 533. 35 seconds
(193892_793301)



Figure 534. 53 seconds
(193892_793302)



Figure 535. 67 seconds
(193892_793303)



Figure 536. 69 seconds
(193892_793304)



Figure 537. 71 seconds
(193892_793305)



Figure 538. 97 seconds
(193892_793306)



Figure 539. 137 seconds
(193892_793307)



Figure 540. 155 seconds
(193892_793308)



Figure 541. 175 seconds
(193892_793309)



Figure 542. 191 seconds
(193892_793310)



Figure 543. 195 seconds
(193892_793311)



Figure 544. Post test 0 minutes
(193892_793312)



Figure 545. Post test 0 minutes
(193892_793313)

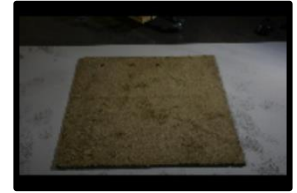


Figure 546. Post test 0 minutes
(193892_793314)



Figure 547. Post test 0 minutes
(193892_793315)

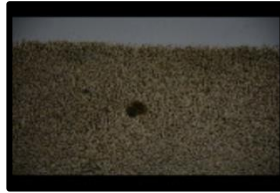


Figure 548. Post test 0 minutes
(193892_793316)

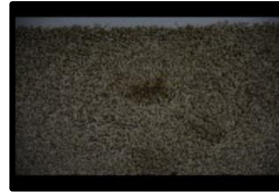


Figure 549. Post test 0 minutes
(193892_793317)



Figure 550. Post test 0 minutes
(193892_793318)



Figure 551. Post test 0 minutes
(193892_793319)



Figure 552. Post test 2 minutes
(193892_793320)



Figure 553. Post test 2 minutes
(193892_793321)



Figure 554. Post test 2 minutes
(193892_793322)



Figure 555. Post test
3 minutes
(193892_793323)



Figure 556. Post test
3 minutes
(193892_793324)



Figure 557. Post test
3 minutes
(193892_793325)

Results for Test 14 (ID 193893)

The following table provides a description of the video(s) taken during this experiment.

Table 18. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	01:39:53	236	193893_20170607_133953_15.mov
MASTER			193893_960278.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 558. Pre test 62 seconds
(193893_793329)



Figure 559. Pre test 58 seconds
(193893_793330)



Figure 560. Pre test 30 seconds
(193893_793331)



Figure 561. Pre test 24 seconds
(193893_793332)



Figure 562. Pre test 20 seconds
(193893_793333)



Figure 563. Pre test 14 seconds
(193893_793334)



Figure 564. 0 seconds
(193893_793335)



Figure 565. 8 seconds
(193893_793336)



Figure 566. 14 seconds
(193893_793337)



Figure 567. 26 seconds
(193893_793338)



Figure 568. 36 seconds
(193893_793339)



Figure 569. 56 seconds
(193893_793340)



Figure 570. 90 seconds
(193893_793341)



Figure 571. 120 seconds
(193893_793342)



Figure 572. 124 seconds
(193893_793343)



Figure 573. 134 seconds
(193893_793344)



Figure 574. 150 seconds
(193893_793345)



Figure 575. 156 seconds
(193893_793346)



Figure 576. 178 seconds
(193893_793347)



Figure 577. 188 seconds
(193893_793348)



Figure 578. Post test 0 minutes
(193893_793349)



Figure 579. Post test 0 minutes
(193893_793350)



Figure 580. Post test 0 minutes
(193893_793351)



Figure 581. Post test 1 minutes
(193893_793352)



Figure 582. Post test 1 minutes
(193893_793353)



Figure 583. Post test 1 minutes
(193893_793354)



Figure 584. Post test 1 minutes
(193893_793355)



Figure 585. Post test 2 minutes
(193893_793356)



Figure 586. Post test 2 minutes
(193893_793357)

Results for Test 15 (ID 193894)

The following table provides a description of the video(s) taken during this experiment.

Table 19. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	01:50:59	167	193894_20170607_135059_15.mov
MASTER			193894_960279.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 587. Pre test
57 seconds
(193894_793361)

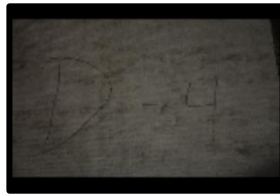


Figure 588. Pre test
55 seconds
(193894_793362)



Figure 589. Pre test
35 seconds
(193894_793363)



Figure 590. Pre test
25 seconds
(193894_793364)



Figure 591. Pre test
21 seconds
(193894_793365)



Figure 592. Pre test
15 seconds
(193894_793366)



Figure 593. 7 seconds
(193894_793367)



Figure 594. 9 seconds
(193894_793368)



Figure 595. 37
seconds
(193894_793369)



Figure 596. 41
seconds
(193894_793370)



Figure 597. 73
seconds
(193894_793371)

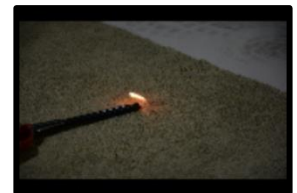


Figure 598. 99
seconds
(193894_793372)



Figure 599. 103 seconds
(193894_793373)



Figure 600. 153 seconds
(193894_793374)



Figure 601. Post test 0 minutes
(193894_793375)



Figure 602. Post test 0 minutes
(193894_793376)



Figure 603. Post test 0 minutes
(193894_793377)



Figure 604. Post test 0 minutes
(193894_793378)



Figure 605. Post test 1 minutes
(193894_793379)



Figure 606. Post test 1 minutes
(193894_793380)

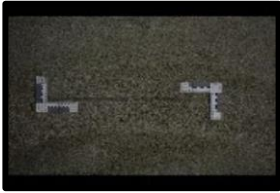


Figure 607. Post test 1 minutes
(193894_793381)



Figure 608. Post test 1 minutes
(193894_793382)

Results for Test 16 (ID 193895)

The following table provides a description of the video(s) taken during this experiment.

Table 20. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	02:00:31	157	193895_20170607_140031_15.mov
MASTER			193895_966911.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 609. Pre test 99 seconds
(193895_793386)



Figure 610. Pre test 97 seconds
(193895_793387)



Figure 611. Pre test 65 seconds
(193895_793388)



Figure 612. Pre test 41 seconds
(193895_793389)



Figure 613. Pre test 39 seconds
(193895_793390)



Figure 614. Pre test 31 seconds
(193895_793391)

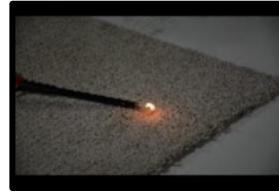


Figure 615. 11 seconds
(193895_793392)



Figure 616. 35 seconds
(193895_793393)



Figure 617. 73 seconds
(193895_793394)



Figure 618. 75 seconds
(193895_793395)



Figure 619. 81 seconds
(193895_793396)



Figure 620. 97 seconds
(193895_793397)



Figure 621. 101 seconds
(193895_793398)



Figure 622. 119 seconds
(193895_793399)



Figure 623. 123 seconds
(193895_793400)



Figure 624. 133 seconds
(193895_793401)



Figure 625. Post test
0 minutes
(193895_793402)

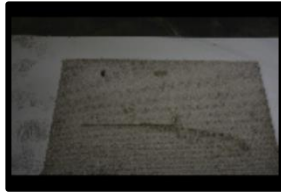


Figure 626. Post test
0 minutes
(193895_793403)



Figure 627. Post test
0 minutes
(193895_793404)



Figure 628. Post test
0 minutes
(193895_793405)



Figure 629. Post test
1 minutes
(193895_793406)



Figure 630. Post test
1 minutes
(193895_793407)

Results for Test 17 (ID 193896)

The following table provides a description of the video(s) taken during this experiment.

Table 21. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	02:22:23	217	193896_20170607_142223_15.mov
MASTER			193896_960280.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 631. Pre test 2 minutes
(193896_793411)



Figure 632. Pre test 2 minutes
(193896_793412)



Figure 633. Pre test 98 seconds
(193896_793413)



Figure 634. Pre test 86 seconds
(193896_793414)



Figure 635. Pre test 84 seconds
(193896_793415)



Figure 636. Pre test 76 seconds
(193896_793416)



Figure 637. Pre test 64 seconds
(193896_793417)



Figure 638. Pre test 62 seconds
(193896_793418)



Figure 639. 6 seconds
(193896_793419)



Figure 640. 8 seconds
(193896_793420)



Figure 641. 8 seconds
(193896_793421)



Figure 642. 12 seconds
(193896_793422)



Figure 643. 14 seconds
(193896_793423)



Figure 644. 18 seconds
(193896_793424)



Figure 645. 20 seconds
(193896_793425)



Figure 646. 22 seconds
(193896_793426)



Figure 647. 26 seconds
(193896_793427)



Figure 648. 32 seconds
(193896_793428)



Figure 649. 34 seconds
(193896_793429)



Figure 650. 38 seconds
(193896_793430)



Figure 651. 40 seconds
(193896_793431)



Figure 652. 46 seconds
(193896_793432)



Figure 653. 48 seconds
(193896_793433)



Figure 654. 48 seconds
(193896_793434)



Figure 655. 58 seconds
(193896_793435)



Figure 656. 62 seconds
(193896_793436)



Figure 657. 72 seconds
(193896_793437)



Figure 658. 74 seconds
(193896_793438)



Figure 659. 76 seconds
(193896_793439)



Figure 660. 78 seconds
(193896_793440)



Figure 661. 80 seconds
(193896_793441)



Figure 662. 82 seconds
(193896_793442)



Figure 663. 98 seconds
(193896_793443)



Figure 664. 100 seconds
(193896_793444)



Figure 665. 104 seconds
(193896_793445)



Figure 666. 108 seconds
(193896_793446)



Figure 667. 120 seconds
(193896_793447)



Figure 668. 124 seconds
(193896_793448)



Figure 669. 134 seconds
(193896_793449)



Figure 670. 158 seconds
(193896_793450)



Figure 671. 168 seconds
(193896_793451)



Figure 672. Post test
0 minutes
(193896_793452)



Figure 673. Post test
0 minutes
(193896_793453)



Figure 674. Post test
0 minutes
(193896_793454)



Figure 675. Post test
0 minutes
(193896_793455)



Figure 676. Post test
1 minutes
(193896_793456)

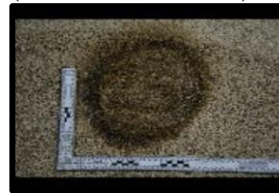


Figure 677. Post test
2 minutes
(193896_793457)

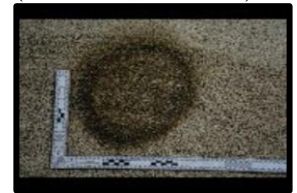


Figure 678. Post test
2 minutes
(193896_793458)

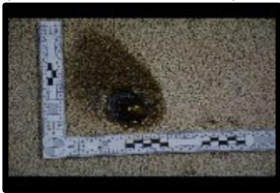


Figure 679. Post test
2 minutes
(193896_793459)

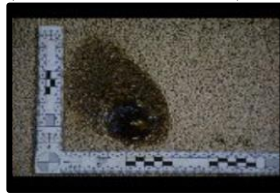


Figure 680. Post test
2 minutes
(193896_793460)

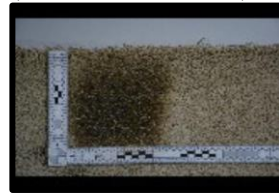


Figure 681. Post test
2 minutes
(193896_793461)

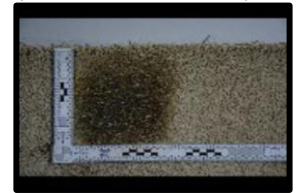


Figure 682. Post test
2 minutes
(193896_793462)



Figure 683. Post test
2 minutes
(193896_793463)



Figure 684. Post test
3 minutes
(193896_793464)

Results for Test 18 (ID 193897)

The following table provides a description of the video(s) taken during this experiment.

Table 22. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	02:34:10	221	193897_20170607_143410_15.mov
MASTER			193897_960281.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 685. Pre test
66 seconds
(193897_793469)



Figure 686. Pre test
64 seconds
(193897_793470)



Figure 687. Pre test
38 seconds
(193897_793471)



Figure 688. Pre test
30 seconds
(193897_793472)



Figure 689. Pre test
28 seconds
(193897_793473)



Figure 690. Pre test
22 seconds
(193897_793474)



Figure 691. 6 seconds
(193897_793475)



Figure 692. 8 seconds
(193897_793476)



Figure 693. 12
seconds
(193897_793477)



Figure 694. 16
seconds
(193897_793478)



Figure 695. 18
seconds
(193897_793479)



Figure 696. 24
seconds
(193897_793480)



Figure 697. 30 seconds
(193897_793481)



Figure 698. 32 seconds
(193897_793482)



Figure 699. 34 seconds
(193897_793483)



Figure 700. 36 seconds
(193897_793484)



Figure 701. 38 seconds
(193897_793485)



Figure 702. 38 seconds
(193897_793486)



Figure 703. 42 seconds
(193897_793487)



Figure 704. 50 seconds
(193897_793488)



Figure 705. 66 seconds
(193897_793489)



Figure 706. 72 seconds
(193897_793490)



Figure 707. 80 seconds
(193897_793491)



Figure 708. 114 seconds
(193897_793492)



Figure 709. 120 seconds
(193897_793493)



Figure 710. 122 seconds
(193897_793494)



Figure 711. 136 seconds
(193897_793495)



Figure 712. 138 seconds
(193897_793496)

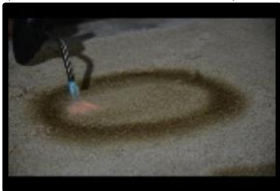


Figure 713. 168 seconds
(193897_793497)



Figure 714. 174 seconds
(193897_793498)



Figure 715. 178 seconds
(193897_793499)



Figure 716. 192 seconds
(193897_793500)



Figure 717. Post test
0 minutes
(193897_793501)



Figure 718. Post test
0 minutes
(193897_793502)



Figure 719. Post test
0 minutes
(193897_793503)

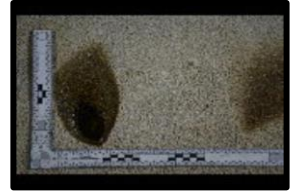


Figure 720. Post test
1 minutes
(193897_793504)

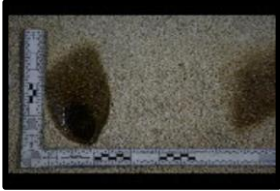


Figure 721. Post test
1 minutes
(193897_793505)



Figure 722. Post test
1 minutes
(193897_793506)



Figure 723. Post test
1 minutes
(193897_793507)

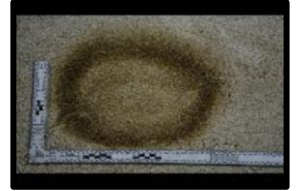


Figure 724. Post test
1 minutes
(193897_793508)

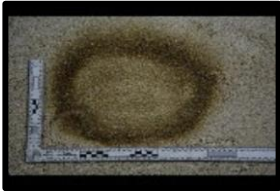


Figure 725. Post test
1 minutes
(193897_793509)



Figure 726. Post test
2 minutes
(193897_793510)



Figure 727. Post test
2 minutes
(193897_793511)

Results for Test 19 (ID 193898)

The following table provides a description of the video(s) taken during this experiment.

Table 23. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	02:52:31	222	193898_20170607_145231_15.mov
MASTER			193898_960282.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 728. Pre test 68 seconds
(193898_793515)

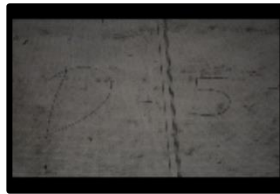


Figure 729. Pre test 66 seconds
(193898_793516)



Figure 730. Pre test 34 seconds
(193898_793517)



Figure 731. Pre test 26 seconds
(193898_793518)



Figure 732. Pre test 24 seconds
(193898_793519)



Figure 733. Pre test 20 seconds
(193898_793520)



Figure 734. 4 seconds
(193898_793521)



Figure 735. 6 seconds
(193898_793522)



Figure 736. 10 seconds
(193898_793523)



Figure 737. 14 seconds
(193898_793524)



Figure 738. 18 seconds
(193898_793525)



Figure 739. 22 seconds
(193898_793526)

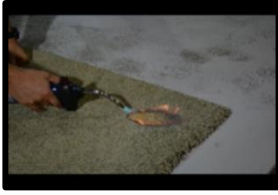


Figure 740. 22 seconds
(193898_793527)



Figure 741. 26 seconds
(193898_793528)



Figure 742. 32 seconds
(193898_793529)

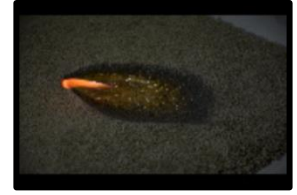


Figure 743. 36 seconds
(193898_793530)

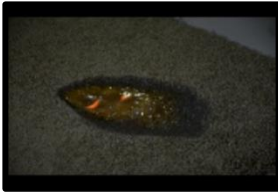


Figure 744. 36 seconds
(193898_793531)



Figure 745. 42 seconds
(193898_793532)



Figure 746. 44 seconds
(193898_793533)



Figure 747. 52 seconds
(193898_793534)



Figure 748. 56 seconds
(193898_793535)



Figure 749. 62 seconds
(193898_793536)



Figure 750. 68 seconds
(193898_793537)



Figure 751. 78 seconds
(193898_793538)



Figure 752. 86 seconds
(193898_793539)



Figure 753. 90 seconds
(193898_793540)



Figure 754. 94 seconds
(193898_793541)



Figure 755. 112 seconds
(193898_793542)



Figure 756. 118 seconds
(193898_793543)



Figure 757. 132 seconds
(193898_793544)



Figure 758. 134 seconds
(193898_793545)



Figure 759. 138 seconds
(193898_793546)



Figure 760. 180 seconds
(193898_793547)



Figure 761. 182 seconds
(193898_793548)



Figure 762. 186 seconds
(193898_793549)



Figure 763. Post test 0 minutes
(193898_793550)

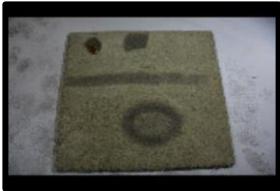


Figure 764. Post test 0 minutes
(193898_793551)

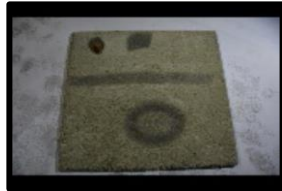


Figure 765. Post test 0 minutes
(193898_793552)



Figure 766. Post test 0 minutes
(193898_793553)

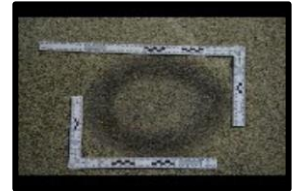


Figure 767. Post test 0 minutes
(193898_793554)

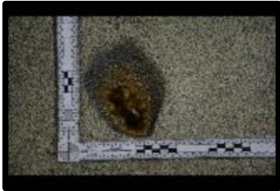


Figure 768. Post test 1 minutes
(193898_793555)

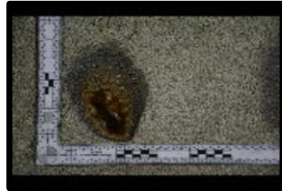


Figure 769. Post test 1 minutes
(193898_793556)

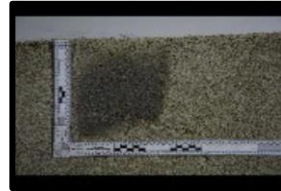


Figure 770. Post test 1 minutes
(193898_793557)

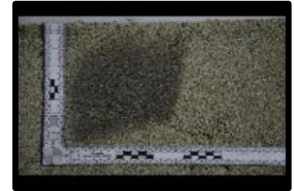


Figure 771. Post test 1 minutes
(193898_793558)



Figure 772. Post test 1 minutes
(193898_793559)



Figure 773. Post test 1 minutes
(193898_793560)

Results for Test 20 (ID 193899)

The following table provides a description of the video(s) taken during this experiment.

Table 24. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	03:03:03	222	193899_20170607_150303_15.mov
MASTER			193899_960283.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 774. Pre test
63 seconds
(193899_793564)



Figure 775. Pre test
61 seconds
(193899_793565)



Figure 776. Pre test
29 seconds
(193899_793566)



Figure 777. Pre test
21 seconds
(193899_793567)



Figure 778. Pre test
21 seconds
(193899_793568)



Figure 779. Pre test
15 seconds
(193899_793569)



Figure 780. 7 seconds
(193899_793570)



Figure 781. 9 seconds
(193899_793571)



Figure 782. 15
seconds
(193899_793572)



Figure 783. 19
seconds
(193899_793573)



Figure 784. 27
seconds
(193899_793574)



Figure 785. 35
seconds
(193899_793575)



Figure 786. 35 seconds
(193899_793576)



Figure 787. 37 seconds
(193899_793577)



Figure 788. 41 seconds
(193899_793578)



Figure 789. 45 seconds
(193899_793579)



Figure 790. 51 seconds
(193899_793580)



Figure 791. 63 seconds
(193899_793581)

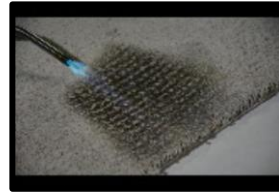


Figure 792. 67 seconds
(193899_793582)



Figure 793. 75 seconds
(193899_793583)



Figure 794. 79 seconds
(193899_793584)



Figure 795. 95 seconds
(193899_793585)



Figure 796. 101 seconds
(193899_793586)



Figure 797. 113 seconds
(193899_793587)



Figure 798. 115 seconds
(193899_793588)



Figure 799. 121 seconds
(193899_793589)



Figure 800. 135 seconds
(193899_793590)



Figure 801. 145 seconds
(193899_793591)



Figure 802. 151 seconds
(193899_793592)

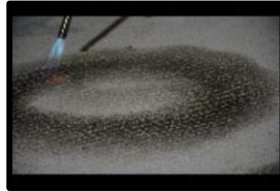


Figure 803. 185 seconds
(193899_793593)



Figure 804. 187 seconds
(193899_793594)



Figure 805. Post test
0 minutes
(193899_793595)



Figure 806. Post test
0 minutes
(193899_793596)



Figure 807. Post test
0 minutes
(193899_793597)



Figure 808. Post test
0 minutes
(193899_793598)



Figure 809. Post test
0 minutes
(193899_793599)



Figure 810. Post test
1 minutes
(193899_793600)



Figure 811. Post test
1 minutes
(193899_793601)



Figure 812. Post test
1 minutes
(193899_793602)



Figure 813. Post test
1 minutes
(193899_793603)



Figure 814. Post test
1 minutes
(193899_793604)



Figure 815. Post test
2 minutes
(193899_793605)



Figure 816. Post test
2 minutes
(193899_793606)



Figure 817. Post test
2 minutes
(193899_793607)

Results for Test 21 (ID 203898)

The following table provides a description of the video(s) taken during this experiment.

Table 25. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	09:16:16	116	203898_20170608_091616_15.mov
MASTER			203898_960284.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 818. Pre test 6 minutes
(203898_803507)

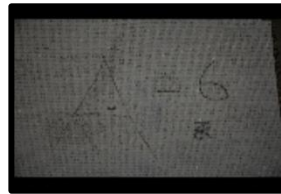


Figure 819. Pre test 6 minutes
(203898_803508)



Figure 820. Pre test 5 minutes
(203898_803509)



Figure 821. Pre test 5 minutes
(203898_803510)



Figure 822. Pre test 5 minutes
(203898_803511)



Figure 823. Pre test 5 minutes
(203898_803512)



Figure 824. 4 seconds
(203898_803513)



Figure 825. 9 seconds
(203898_803514)



Figure 826. 11 seconds
(203898_803515)



Figure 827. 13 seconds
(203898_803516)



Figure 828. 16 seconds
(203898_803517)



Figure 829. 25 seconds
(203898_803518)



Figure 830. 32 seconds
(203898_803519)



Figure 831. 34 seconds
(203898_803520)



Figure 832. 44 seconds
(203898_803521)



Figure 833. 52 seconds
(203898_803522)



Figure 834. 59 seconds
(203898_803523)



Figure 835. 65 seconds
(203898_803524)



Figure 836. 78 seconds
(203898_803525)



Figure 837. 79 seconds
(203898_803526)

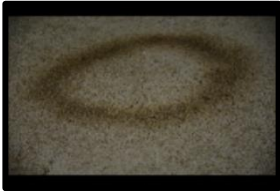


Figure 838. 82 seconds
(203898_803527)



Figure 839. 84 seconds
(203898_803528)



Figure 840. 87 seconds
(203898_803529)



Figure 841. Post test 0 minutes
(203898_803530)



Figure 842. Post test 0 minutes
(203898_803531)

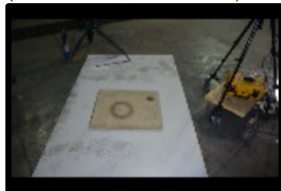


Figure 843. Post test 0 minutes
(203898_803532)



Figure 844. Post test 0 minutes
(203898_803533)



Figure 845. Post test 0 minutes
(203898_803534)

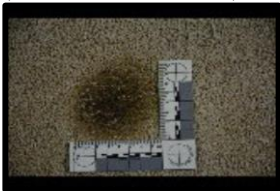


Figure 846. Post test 0 minutes
(203898_803535)



Figure 847. Post test 0 minutes
(203898_803536)



Figure 848. Post test 0 minutes
(203898_803537)

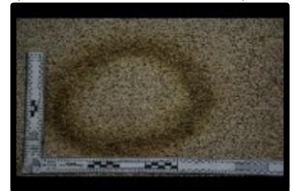


Figure 849. Post test 0 minutes
(203898_803538)

Results for Test 22 (ID 203899)

The following table provides a description of the video(s) taken during this experiment.

Table 26. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	09:27:57	122	203899_20170608_092757_15.mov
MASTER			203899_960285.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 850. Pre test
79 seconds
(203899_803542)



Figure 851. Pre test
77 seconds
(203899_803543)



Figure 852. Pre test
50 seconds
(203899_803544)



Figure 853. Pre test
43 seconds
(203899_803545)



Figure 854. Pre test
40 seconds
(203899_803546)



Figure 855. Pre test
35 seconds
(203899_803547)



Figure 856. 12
seconds
(203899_803548)



Figure 857. 16
seconds
(203899_803549)



Figure 858. 19
seconds
(203899_803550)

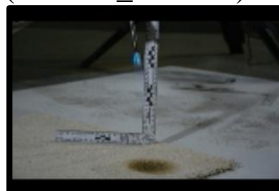


Figure 859. 40
seconds
(203899_803551)



Figure 860. 48
seconds
(203899_803552)

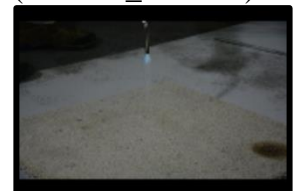


Figure 861. 50
seconds
(203899_803553)



Figure 862. 53 seconds
(203899_803554)



Figure 863. 56 seconds
(203899_803555)



Figure 864. 63 seconds
(203899_803556)



Figure 865. 88 seconds
(203899_803557)



Figure 866. 91 seconds
(203899_803558)



Figure 867. 94 seconds
(203899_803559)



Figure 868. 107 seconds
(203899_803560)



Figure 869. Post test
0 minutes
(203899_803561)



Figure 870. Post test
0 minutes
(203899_803562)

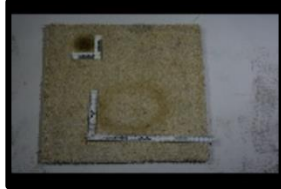


Figure 871. Post test
0 minutes
(203899_803563)

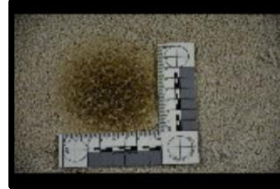


Figure 872. Post test
0 minutes
(203899_803564)



Figure 873. Post test
0 minutes
(203899_803565)



Figure 874. Post test
0 minutes
(203899_803566)

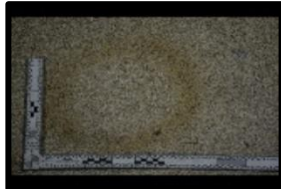


Figure 875. Post test
0 minutes
(203899_803567)

Results for Test 23 (ID 203900)

The following table provides a description of the video(s) taken during this experiment.

Table 27. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	09:36:59	122	203900_20170608_093659_15.mov
MASTER			203900_960286.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 876. Pre test
68 seconds
(203900_803571)



Figure 877. Pre test
66 seconds
(203900_803572)

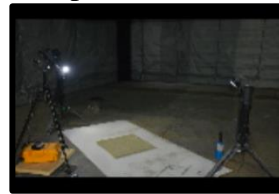


Figure 878. Pre test
32 seconds
(203900_803573)



Figure 879. Pre test
24 seconds
(203900_803574)



Figure 880. Pre test
22 seconds
(203900_803575)



Figure 881. Pre test
18 seconds
(203900_803576)



Figure 882. 8 seconds
(203900_803577)



Figure 883. 12 seconds
(203900_803578)



Figure 884. 16 seconds
(203900_803579)

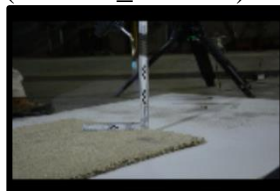


Figure 885. 18 seconds
(203900_803580)

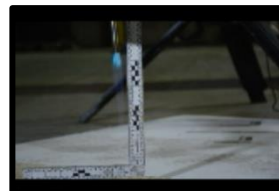


Figure 886. 20 seconds
(203900_803581)

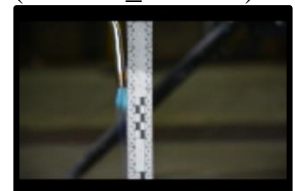


Figure 887. 22 seconds
(203900_803582)



Figure 888. 26 seconds
(203900_803583)



Figure 889. 34 seconds
(203900_803584)



Figure 890. 42 seconds
(203900_803585)



Figure 891. 72 seconds
(203900_803586)



Figure 892. 74 seconds
(203900_803587)



Figure 893. 96 seconds
(203900_803588)

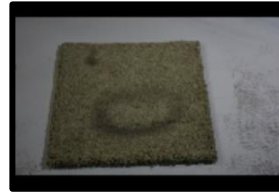


Figure 894. Post test 0 minutes
(203900_803589)



Figure 895. Post test 0 minutes
(203900_803590)



Figure 896. Post test 0 minutes
(203900_803591)

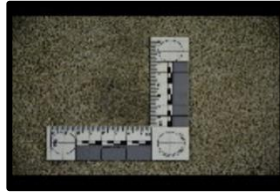


Figure 897. Post test 0 minutes
(203900_803592)

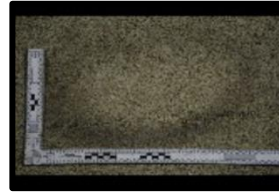


Figure 898. Post test 0 minutes
(203900_803593)

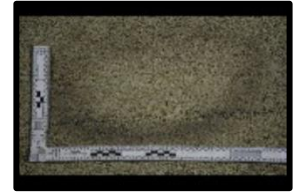


Figure 899. Post test 0 minutes
(203900_803594)

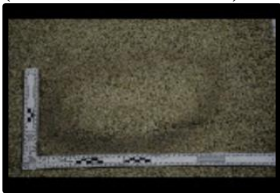


Figure 900. Post test 0 minutes
(203900_803595)

Results for Test 24 (ID 203901)

The following table provides a description of the video(s) taken during this experiment.

Table 28. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	09:46:06	116	203901_20170608_094606_15.mov
MASTER			203901_960287.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 901. Pre test
112 seconds
(203901_803599)



Figure 902. Pre test
84 seconds
(203901_803600)



Figure 903. Pre test
64 seconds
(203901_803601)



Figure 904. Pre test
62 seconds
(203901_803602)



Figure 905. Pre test
56 seconds
(203901_803603)



Figure 906. 6 seconds
(203901_803604)



Figure 907. 12 seconds
(203901_803605)

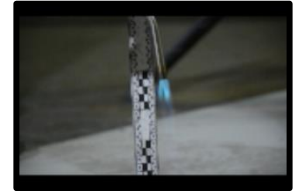


Figure 908. 14 seconds
(203901_803606)



Figure 909. 20 seconds
(203901_803607)



Figure 910. 32 seconds
(203901_803608)



Figure 911. 34 seconds
(203901_803609)



Figure 912. 42 seconds
(203901_803610)



Figure 913. 60 seconds
(203901_803611)



Figure 914. 62 seconds
(203901_803612)



Figure 915. 64 seconds
(203901_803613)



Figure 916. 102 seconds
(203901_803614)



Figure 917. Post test
0 minutes
(203901_803615)



Figure 918. Post test
0 minutes
(203901_803616)



Figure 919. Post test
0 minutes
(203901_803617)



Figure 920. Post test
0 minutes
(203901_803618)



Figure 921. Post test
0 minutes
(203901_803619)



Figure 922. Post test
0 minutes
(203901_803620)



Figure 923. Post test
0 minutes
(203901_803621)

Results for Test 25 (ID 203902)

The following table provides a description of the video(s) taken during this experiment.

Table 29. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	10:08:22	182	203902_20170608_100822_15.mov
MASTER			203902_960288.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 924. Pre test 7 minutes
(203902_803625)

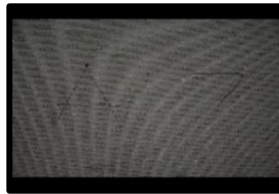


Figure 925. Pre test 7 minutes
(203902_803626)



Figure 926. Pre test 5 minutes
(203902_803627)



Figure 927. Pre test 5 minutes
(203902_803628)



Figure 928. Pre test 5 minutes
(203902_803629)



Figure 929. Pre test 5 minutes
(203902_803630)



Figure 930. Pre test 5 minutes
(203902_803631)



Figure 931. Pre test 5 minutes
(203902_803632)



Figure 932. Pre test 4 minutes
(203902_803633)



Figure 933. Pre test 68 seconds
(203902_803634)



Figure 934. Pre test 60 seconds
(203902_803635)



Figure 935. Pre test 54 seconds
(203902_803636)



Figure 936. Pre test
48 seconds
(203902_803637)



Figure 937. Pre test
40 seconds
(203902_803638)



Figure 938. Pre test
22 seconds
(203902_803639)



Figure 939. 4 seconds
(203902_803640)



Figure 940. 6 seconds
(203902_803641)



Figure 941. 12
seconds
(203902_803642)



Figure 942. 38
seconds
(203902_803643)



Figure 943. 46
seconds
(203902_803644)



Figure 944. 52
seconds
(203902_803645)



Figure 945. 62
seconds
(203902_803646)



Figure 946. 64
seconds
(203902_803647)



Figure 947. 68
seconds
(203902_803648)



Figure 948. 70
seconds
(203902_803649)



Figure 949. 80
seconds
(203902_803650)



Figure 950. 82
seconds
(203902_803651)



Figure 951. 92
seconds
(203902_803652)



Figure 952. 126
seconds
(203902_803653)



Figure 953. 138
seconds
(203902_803654)



Figure 954. 142
seconds
(203902_803655)



Figure 955. 144
seconds
(203902_803656)



Figure 956. 146 seconds
(203902_803657)



Figure 957. 148 seconds
(203902_803658)



Figure 958. Post test 0 minutes
(203902_803659)



Figure 959. Post test 0 minutes
(203902_803660)



Figure 960. Post test 0 minutes
(203902_803661)



Figure 961. Post test 0 minutes
(203902_803662)



Figure 962. Post test 0 minutes
(203902_803663)

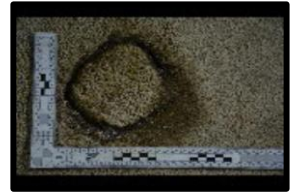


Figure 963. Post test 0 minutes
(203902_803664)



Figure 964. Post test 1 minutes
(203902_803665)

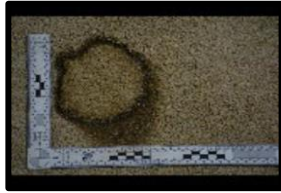


Figure 965. Post test 1 minutes
(203902_803666)

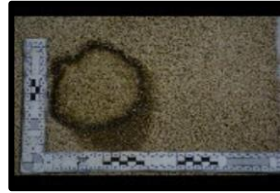


Figure 966. Post test 1 minutes
(203902_803667)



Figure 967. Post test 1 minutes
(203902_803668)

Results for Test 26 (ID 203903)

The following table provides a description of the video(s) taken during this experiment.

Table 30. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	10:41:39	257	203903_20170608_104139_15.mov
MASTER			203903_960289.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.

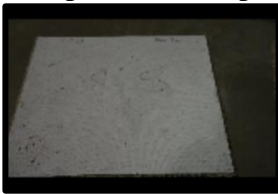


Figure 968. Pre test 3 minutes
(203903_803672)



Figure 969. Pre test 3 minutes
(203903_803673)

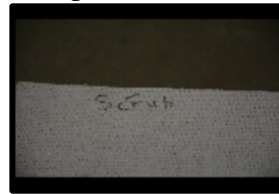


Figure 970. Pre test 3 minutes
(203903_803674)



Figure 971. Pre test 70 seconds
(203903_803675)



Figure 972. Pre test 68 seconds
(203903_803676)



Figure 973. Pre test 62 seconds
(203903_803677)



Figure 974. Pre test 38 seconds
(203903_803678)



Figure 975. Pre test 32 seconds
(203903_803679)



Figure 976. Pre test 10 seconds
(203903_803680)



Figure 977. 4 seconds
(203903_803681)



Figure 978. 6 seconds
(203903_803682)



Figure 979. 10 seconds
(203903_803683)



Figure 980. 12 seconds
(203903_803684)



Figure 981. 14 seconds
(203903_803685)



Figure 982. 22 seconds
(203903_803686)



Figure 983. 22 seconds
(203903_803687)



Figure 984. 26 seconds
(203903_803688)



Figure 985. 30 seconds
(203903_803689)



Figure 986. 32 seconds
(203903_803690)



Figure 987. 34 seconds
(203903_803691)



Figure 988. 38 seconds
(203903_803692)



Figure 989. 42 seconds
(203903_803693)



Figure 990. 44 seconds
(203903_803694)



Figure 991. 56 seconds
(203903_803695)



Figure 992. 58 seconds
(203903_803696)

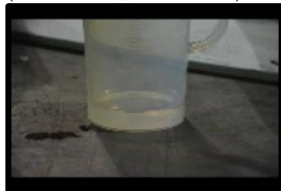


Figure 993. 64 seconds
(203903_803697)



Figure 994. 72 seconds
(203903_803698)



Figure 995. 74 seconds
(203903_803699)



Figure 996. 78 seconds
(203903_803700)



Figure 997. 82 seconds
(203903_803701)



Figure 998. 84 seconds
(203903_803702)



Figure 999. 92 seconds
(203903_803703)



Figure 1000. 94 seconds
(203903_803704)



Figure 1001. 100 seconds
(203903_803705)



Figure 1002. 102 seconds
(203903_803706)



Figure 1003. 106 seconds
(203903_803707)



Figure 1004. 110 seconds
(203903_803708)



Figure 1005. 112 seconds
(203903_803709)



Figure 1006. 118 seconds
(203903_803710)



Figure 1007. 122 seconds
(203903_803711)



Figure 1008. 124 seconds
(203903_803712)



Figure 1009. 128 seconds
(203903_803713)



Figure 1010. 134 seconds
(203903_803714)



Figure 1011. 138 seconds
(203903_803715)



Figure 1012. 140 seconds
(203903_803716)



Figure 1013. 148 seconds
(203903_803717)



Figure 1014. 154 seconds
(203903_803718)



Figure 1015. 156 seconds
(203903_803719)



Figure 1016. 158 seconds
(203903_803720)



Figure 1017. 162 seconds
(203903_803721)



Figure 1018. 168 seconds
(203903_803722)



Figure 1019. 172 seconds
(203903_803723)



Figure 1020. 174 seconds
(203903_803724)



Figure 1021. 180 seconds
(203903_803725)



Figure 1022. 182 seconds
(203903_803726)



Figure 1023. 194 seconds
(203903_803727)



Figure 1024. 198 seconds
(203903_803728)



Figure 1025. 200 seconds
(203903_803729)



Figure 1026. 202 seconds
(203903_803730)



Figure 1027. 206 seconds
(203903_803731)



Figure 1028. 210 seconds
(203903_803732)



Figure 1029. 212 seconds
(203903_803733)



Figure 1030. 214 seconds
(203903_803734)



Figure 1031. 234 seconds
(203903_803735)



Figure 1032. 238 seconds
(203903_803736)

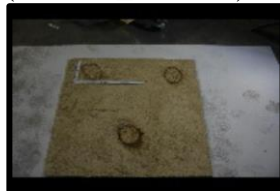


Figure 1033. Post test 6 minutes
(203903_803737)



Figure 1034. Post test 6 minutes
(203903_803738)



Figure 1035. Post test 6 minutes
(203903_803739)



Figure 1036. Post test 6 minutes
(203903_803740)

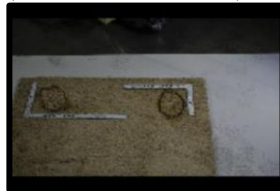


Figure 1037. Post test 6 minutes
(203903_803741)

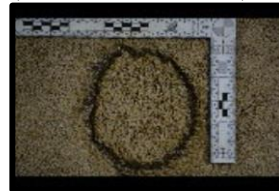


Figure 1038. Post test 6 minutes
(203903_803742)

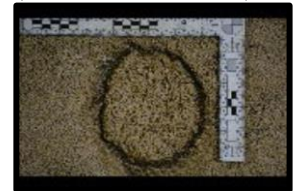


Figure 1039. Post test 6 minutes
(203903_803743)



Figure 1040. Post test
7 minutes
(203903_803744)

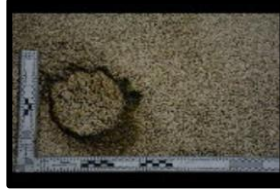


Figure 1041. Post test
7 minutes
(203903_803745)



Figure 1042. Post test
7 minutes
(203903_803746)

Results for Test 27 (ID 203904)

The following table provides a description of the video(s) taken during this experiment.

Table 31. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	11:02:51	246	203904_20170608_110251_15.mov
MASTER			203904_960290.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 1043. Pre test 105 seconds
(203904_803751)



Figure 1044. Pre test 79 seconds
(203904_803752)



Figure 1045. Pre test 71 seconds
(203904_803753)



Figure 1046. Pre test 69 seconds
(203904_803754)



Figure 1047. Pre test 63 seconds
(203904_803755)



Figure 1048. Pre test 21 seconds
(203904_803756)

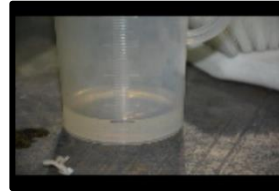


Figure 1049. Pre test 15 seconds
(203904_803757)



Figure 1050. Pre test 3 seconds
(203904_803758)



Figure 1051. 3 seconds
(203904_803759)



Figure 1052. 5 seconds
(203904_803760)



Figure 1053. 5 seconds
(203904_803761)



Figure 1054. 7 seconds
(203904_803762)



Figure 1055. 9 seconds
(203904_803763)



Figure 1056. 11 seconds
(203904_803764)



Figure 1057. 13 seconds
(203904_803765)



Figure 1058. 17 seconds
(203904_803766)



Figure 1059. 19 seconds
(203904_803767)



Figure 1060. 25 seconds
(203904_803768)



Figure 1061. 27 seconds
(203904_803769)



Figure 1062. 29 seconds
(203904_803770)



Figure 1063. 37 seconds
(203904_803771)



Figure 1064. 39 seconds
(203904_803772)



Figure 1065. 39 seconds
(203904_803773)



Figure 1066. 43 seconds
(203904_803774)



Figure 1067. 45 seconds
(203904_803775)



Figure 1068. 45 seconds
(203904_803776)



Figure 1069. 47 seconds
(203904_803777)



Figure 1070. 57 seconds
(203904_803778)



Figure 1071. 57 seconds
(203904_803779)



Figure 1072. 67 seconds
(203904_803780)



Figure 1073. 67 seconds
(203904_803781)



Figure 1074. 69 seconds
(203904_803782)



Figure 1075. 71 seconds
(203904_803783)



Figure 1076. 73 seconds
(203904_803784)



Figure 1077. 75 seconds
(203904_803785)



Figure 1078. 79 seconds
(203904_803786)

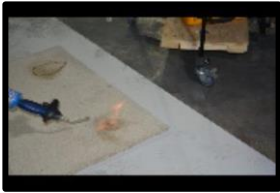


Figure 1079. 87 seconds
(203904_803787)



Figure 1080. 89 seconds
(203904_803788)



Figure 1081. 91 seconds
(203904_803789)



Figure 1082. 97 seconds
(203904_803790)



Figure 1083. 105 seconds
(203904_803791)



Figure 1084. 113 seconds
(203904_803792)



Figure 1085. 115 seconds
(203904_803793)



Figure 1086. 121 seconds
(203904_803794)



Figure 1087. 123 seconds
(203904_803795)



Figure 1088. 129 seconds
(203904_803796)



Figure 1089. 129 seconds
(203904_803797)



Figure 1090. 141 seconds
(203904_803798)



Figure 1091. 141 seconds
(203904_803799)



Figure 1092. 149 seconds
(203904_803800)



Figure 1093. 151 seconds
(203904_803801)



Figure 1094. 155 seconds
(203904_803802)



Figure 1095. 157 seconds
(203904_803803)



Figure 1096. 167 seconds
(203904_803804)



Figure 1097. 169 seconds
(203904_803805)



Figure 1098. 181 seconds
(203904_803806)



Figure 1099. 187 seconds
(203904_803807)



Figure 1100. 205 seconds
(203904_803808)



Figure 1101. 207 seconds
(203904_803809)



Figure 1102. 223 seconds
(203904_803810)



Figure 1103. 229 seconds
(203904_803811)



Figure 1104. Post test 0 minutes
(203904_803812)

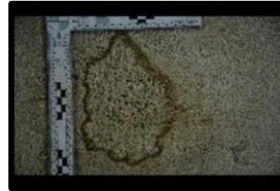


Figure 1105. Post test 0 minutes
(203904_803813)



Figure 1106. Post test 0 minutes
(203904_803814)



Figure 1107. Post test 1 minutes
(203904_803815)



Figure 1108. Post test 1 minutes
(203904_803816)

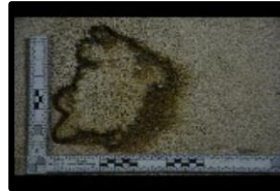


Figure 1109. Post test 1 minutes
(203904_803817)



Figure 1110. Post test 1 minutes
(203904_803818)

Results for Test 28 (ID 203905)

The following table provides a description of the video(s) taken during this experiment.

Table 32. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	11:19:08	251	203905_20170608_111908_15.mov
MASTER			203905_960291.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 1111. Pre test 5 minutes
(203905_803822)



Figure 1112. Pre test 4 minutes
(203905_803823)

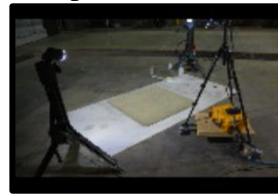


Figure 1113. Pre test 4 minutes
(203905_803824)



Figure 1114. Pre test 3 minutes
(203905_803825)



Figure 1115. Pre test 3 minutes
(203905_803826)



Figure 1116. Pre test 3 minutes
(203905_803827)



Figure 1117. 0 seconds
(203905_803828)



Figure 1118. 4 seconds
(203905_803829)



Figure 1119. 6 seconds
(203905_803830)



Figure 1120. 6 seconds
(203905_803831)



Figure 1121. 14 seconds
(203905_803832)



Figure 1122. 24 seconds
(203905_803833)



Figure 1123. 28 seconds
(203905_803834)



Figure 1124. 36 seconds
(203905_803835)



Figure 1125. 42 seconds
(203905_803836)



Figure 1126. 60 seconds
(203905_803837)



Figure 1127. 60 seconds
(203905_803838)



Figure 1128. 68 seconds
(203905_803839)



Figure 1129. 70 seconds
(203905_803840)



Figure 1130. 72 seconds
(203905_803841)



Figure 1131. 74 seconds
(203905_803842)



Figure 1132. 78 seconds
(203905_803843)



Figure 1133. 88 seconds
(203905_803844)



Figure 1134. 92 seconds
(203905_803845)



Figure 1135. 110 seconds
(203905_803846)



Figure 1136. 130 seconds
(203905_803847)



Figure 1137. 142 seconds
(203905_803848)



Figure 1138. 142 seconds
(203905_803849)



Figure 1139. 150 seconds
(203905_803850)



Figure 1140. 150 seconds
(203905_803851)



Figure 1141. 154 seconds
(203905_803852)



Figure 1142. 158 seconds
(203905_803853)



Figure 1143. 168 seconds
(203905_803854)



Figure 1144. 170 seconds
(203905_803855)



Figure 1145. 200 seconds
(203905_803856)



Figure 1146. 230 seconds
(203905_803857)



Figure 1147. Post test 0 minutes
(203905_803858)



Figure 1148. Post test 0 minutes
(203905_803859)



Figure 1149. Post test 0 minutes
(203905_803860)

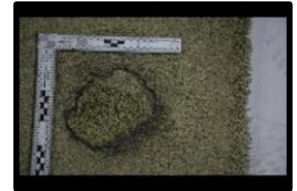


Figure 1150. Post test 1 minutes
(203905_803861)



Figure 1151. Post test 1 minutes
(203905_803862)

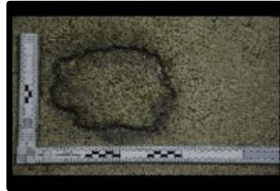


Figure 1152. Post test 1 minutes
(203905_803863)

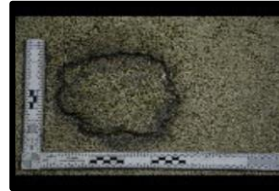


Figure 1153. Post test 1 minutes
(203905_803864)

Results for Test 29 (ID 203906)

The following table provides a description of the video(s) taken during this experiment.

Table 33. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	11:30:34	252	203906_20170608_113034_15.mov
MASTER			203906_960292.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 1154. Pre test
2 minutes
(203906_803868)



Figure 1155. Pre test
109 seconds
(203906_803869)



Figure 1156. Pre test
75 seconds
(203906_803870)



Figure 1157. Pre test
71 seconds
(203906_803871)



Figure 1158. Pre test
25 seconds
(203906_803872)



Figure 1159. Pre test
21 seconds
(203906_803873)



Figure 1160. 5
seconds
(203906_803874)



Figure 1161. 5
seconds
(203906_803875)



Figure 1162. 11
seconds
(203906_803876)



Figure 1163. 11
seconds
(203906_803877)



Figure 1164. 15
seconds
(203906_803878)



Figure 1165. 21
seconds
(203906_803879)



Figure 1166. 23 seconds
(203906_803880)



Figure 1167. 27 seconds
(203906_803881)



Figure 1168. 43 seconds
(203906_803882)



Figure 1169. 45 seconds
(203906_803883)



Figure 1170. 55 seconds
(203906_803884)



Figure 1171. 61 seconds
(203906_803885)

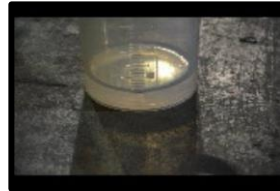


Figure 1172. 63 seconds
(203906_803886)



Figure 1173. 71 seconds
(203906_803887)



Figure 1174. 73 seconds
(203906_803888)



Figure 1175. 79 seconds
(203906_803889)



Figure 1176. 91 seconds
(203906_803890)



Figure 1177. 97 seconds
(203906_803891)



Figure 1178. 131 seconds
(203906_803892)



Figure 1179. 131 seconds
(203906_803893)



Figure 1180. 141 seconds
(203906_803894)



Figure 1181. 147 seconds
(203906_803895)



Figure 1182. 147 seconds
(203906_803896)



Figure 1183. 155 seconds
(203906_803897)



Figure 1184. 157 seconds
(203906_803898)



Figure 1185. 161 seconds
(203906_803899)



Figure 1186. 169 seconds
(203906_803900)



Figure 1187. 177 seconds
(203906_803901)



Figure 1188. 229 seconds
(203906_803902)



Figure 1189. 231 seconds
(203906_803903)



Figure 1190. Post test 0 minutes
(203906_803904)



Figure 1191. Post test 0 minutes
(203906_803905)



Figure 1192. Post test 0 minutes
(203906_803906)

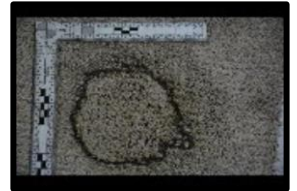


Figure 1193. Post test 0 minutes
(203906_803907)



Figure 1194. Post test 0 minutes
(203906_803908)



Figure 1195. Post test 1 minutes
(203906_803909)



Figure 1196. Post test 1 minutes
(203906_803910)



Figure 1197. Post test 1 minutes
(203906_803911)

Results for Test 30 (ID 203907)

The following table provides a description of the video(s) taken during this experiment.

Table 34. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	11:46:56	87	203907_20170608_114656_15.mov
MASTER			203907_960293.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 1198. Pre test 3 minutes
(203907_803915)



Figure 1199. Pre test 2 minutes
(203907_803916)



Figure 1200. Pre test 2 minutes
(203907_803917)



Figure 1201. Pre test 2 minutes
(203907_803918)



Figure 1202. Pre test 118 seconds
(203907_803919)



Figure 1203. Pre test 36 seconds
(203907_803920)



Figure 1204. Pre test 22 seconds
(203907_803921)



Figure 1205. Pre test 16 seconds
(203907_803922)



Figure 1206. 4 seconds
(203907_803923)



Figure 1207. 6 seconds
(203907_803924)



Figure 1208. 10 seconds
(203907_803925)



Figure 1209. 16 seconds
(203907_803926)



Figure 1210. 22 seconds
(203907_803927)



Figure 1211. 26 seconds
(203907_803928)



Figure 1212. 32 seconds
(203907_803929)



Figure 1213. 46 seconds
(203907_803930)



Figure 1214. 50 seconds
(203907_803931)



Figure 1215. 58 seconds
(203907_803932)



Figure 1216. 62 seconds
(203907_803933)



Figure 1217. 64 seconds
(203907_803934)



Figure 1218. Post test
0 minutes
(203907_803935)



Figure 1219. Post test
0 minutes
(203907_803936)

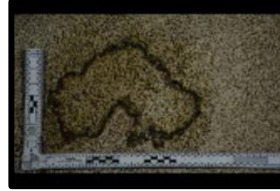


Figure 1220. Post test
1 minutes
(203907_803937)



Figure 1221. Post test
1 minutes
(203907_803938)

Results for Test 31 (ID 203908)

The following table provides a description of the video(s) taken during this experiment.

Table 35. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	11:53:08	81	203908_20170608_115308_15.mov
MASTER			203908_960294.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 1222. Pre test
64 seconds
(203908_803942)



Figure 1223. Pre test
42 seconds
(203908_803943)



Figure 1224. Pre test
36 seconds
(203908_803944)



Figure 1225. Pre test
32 seconds
(203908_803945)

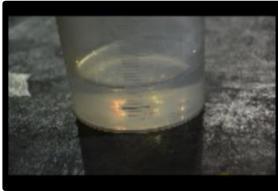


Figure 1226. Pre test
18 seconds
(203908_803946)

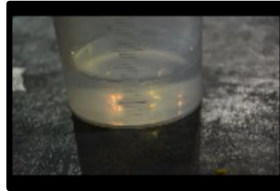


Figure 1227. Pre test
14 seconds
(203908_803947)



Figure 1228. 4
seconds
(203908_803948)



Figure 1229. 8
seconds
(203908_803949)



Figure 1230. 12
seconds
(203908_803950)



Figure 1231. 14
seconds
(203908_803951)



Figure 1232. 16
seconds
(203908_803952)



Figure 1233. 20
seconds
(203908_803953)



Figure 1234. 22 seconds
(203908_803954)



Figure 1235. 32 seconds
(203908_803955)



Figure 1236. 36 seconds
(203908_803956)



Figure 1237. 38 seconds
(203908_803957)



Figure 1238. 46 seconds
(203908_803958)



Figure 1239. 50 seconds
(203908_803959)



Figure 1240. 58 seconds
(203908_803960)



Figure 1241. 62 seconds
(203908_803961)



Figure 1242. Post test
0 minutes
(203908_803962)



Figure 1243. Post test
0 minutes
(203908_803963)

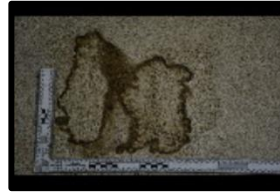


Figure 1244. Post test
0 minutes
(203908_803964)



Figure 1245. Post test
0 minutes
(203908_803965)



Figure 1246. Post test
0 minutes
(203908_803966)



Figure 1247. Post test
0 minutes
(203908_803967)

Results for Test 32 (ID 203909)

The following table provides a description of the video(s) taken during this experiment.

Table 36. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	12:01:29	82	203909_20170608_120129_15.mov
MASTER			203909_960295.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 1248. Pre test
2 minutes
(203909_803971)



Figure 1249. Pre test
108 seconds
(203909_803972)

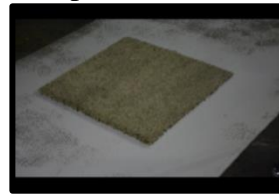


Figure 1250. Pre test
102 seconds
(203909_803973)



Figure 1251. Pre test
96 seconds
(203909_803974)



Figure 1252. Pre test
28 seconds
(203909_803975)



Figure 1253. Pre test
20 seconds
(203909_803976)



Figure 1254. 4
seconds
(203909_803977)



Figure 1255. 6
seconds
(203909_803978)



Figure 1256. 12
seconds
(203909_803979)



Figure 1257. 14
seconds
(203909_803980)



Figure 1258. 16
seconds
(203909_803981)



Figure 1259. 20
seconds
(203909_803982)



Figure 1260. 22 seconds
(203909_803983)



Figure 1261. 30 seconds
(203909_803984)



Figure 1262. 34 seconds
(203909_803985)



Figure 1263. 38 seconds
(203909_803986)



Figure 1264. 42 seconds
(203909_803987)



Figure 1265. 50 seconds
(203909_803988)



Figure 1266. 54 seconds
(203909_803989)



Figure 1267. 58 seconds
(203909_803990)



Figure 1268. 62 seconds
(203909_803991)



Figure 1269. Post test
1 minutes
(203909_803992)



Figure 1270. Post test
1 minutes
(203909_803993)



Figure 1271. Post test
1 minutes
(203909_803994)



Figure 1272. Post test
1 minutes
(203909_803995)

Results for Test 33 (ID 203910)

The following table provides a description of the video(s) taken during this experiment.

Table 37. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	12:08:26	81	203910_20170608_120826_15.mov
MASTER			203910_960296.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.

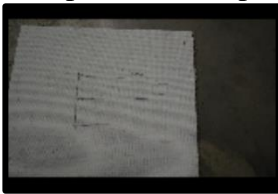


Figure 1273. Pre test
83 seconds
(203910_803999)



Figure 1274. Pre test
53 seconds
(203910_804000)



Figure 1275. Pre test
43 seconds
(203910_804001)



Figure 1276. Pre test
37 seconds
(203910_804002)



Figure 1277. Pre test
19 seconds
(203910_804003)



Figure 1278. Pre test
13 seconds
(203910_804004)



Figure 1279. 5
seconds
(203910_804005)



Figure 1280. 7
seconds
(203910_804006)



Figure 1281. 11
seconds
(203910_804007)



Figure 1282. 15
seconds
(203910_804008)



Figure 1283. 19
seconds
(203910_804009)



Figure 1284. 21
seconds
(203910_804010)



Figure 1285. 29 seconds
(203910_804011)



Figure 1286. 45 seconds
(203910_804012)



Figure 1287. 49 seconds
(203910_804013)



Figure 1288. 53 seconds
(203910_804014)



Figure 1289. 59 seconds
(203910_804015)



Figure 1290. 61 seconds
(203910_804016)

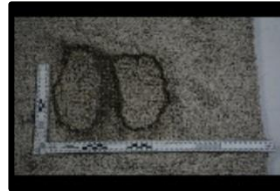


Figure 1291. Post test 0 minutes
(203910_804017)

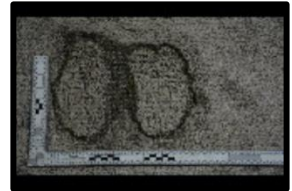


Figure 1292. Post test 0 minutes
(203910_804018)



Figure 1293. Post test 0 minutes
(203910_804019)



Figure 1294. Post test 0 minutes
(203910_804020)

Results for Test 34 (ID 203911)

The following table provides a description of the video(s) taken during this experiment.

Table 38. Video Log

Description	Start Time	Video Duration (s)	Filename
HD CAMERA	01:58:33	81	203911_20170608_135833_15.mov
MASTER			203911_960297.mov

The following figures show all of the still photographs uploaded into the FireTOSS system. The caption below each figure provides the picture's filename as well as any description and elapsed test time associated with the picture.



Figure 1295. Pre test 2 minutes
(203911_804024)



Figure 1296. Pre test 2 minutes
(203911_804025)



Figure 1297. Pre test 2 minutes
(203911_804026)



Figure 1298. Pre test 2 minutes
(203911_804027)



Figure 1299. Pre test 2 minutes
(203911_804028)



Figure 1300. Pre test 38 seconds
(203911_804029)



Figure 1301. 4 seconds
(203911_804030)



Figure 1302. 6 seconds
(203911_804031)



Figure 1303. 8 seconds
(203911_804032)



Figure 1304. 10 seconds
(203911_804033)



Figure 1305. 22 seconds
(203911_804034)



Figure 1306. 24 seconds
(203911_804035)



Figure 1307. 30 seconds
(203911_804036)



Figure 1308. 46 seconds
(203911_804037)



Figure 1309. 48 seconds
(203911_804038)



Figure 1310. 62 seconds
(203911_804039)



Figure 1311. 66 seconds
(203911_804040)



Figure 1312. Post test
0 minutes
(203911_804041)

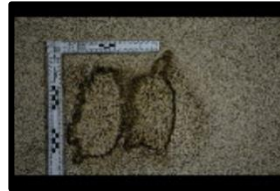


Figure 1313. Post test
0 minutes
(203911_804042)



Figure 1314. Post test
0 minutes
(203911_804043)



Figure 1315. Post test
0 minutes
(203911_804044)

References

1. Laboratory Instruction LI017 – Laboratory Conditions, Bureau of Alcohol, Tobacco, Firearms and Explosives - Fire Research Laboratory, Beltsville, MD.
2. Laboratory Instruction LI003 - Digital Cameras, Bureau of Alcohol, Tobacco, Firearms and Explosives - Fire Research Laboratory, Beltsville, MD