

Mr C Lubbock
Ultimate Fire Ltd
43 Nevill Way
Loughton
Essex
IG10 3BG

XX July 2021
WF No.: 505799
Your Pro-Forma Invoice Order No: PF09621183

Dear Mr Lubbock

We confirm the results of the indicative tests in accordance with BS 8458:2015: Annex C which was conducted on 20th July 2021 on your glass bulb and heat/smoke alarm activation watermist system referenced "12 / 80 system" with an operating pressure of 80 bar with all three nozzles activating at the same time and water flow rate at operation of 12 l/min

Thermocouple location	Maximum temperature °C (as per BS 8458:2015: Annex C.4 paragraph 3)		BS 8458: 2015 Table 2 Fire test maximum temperatures (°C)
	Test 1	Test 2	
75mm below the underside of the ceiling	179	58	320
1.6m above the floor, close to fire (if applicable)	46	45	95
1.6m above the floor, centre (if applicable)	N/A	N/A	95
1.6m above the floor, furthest from fire	46	46	95

Key:

Test 1 – Between two nozzles (Activated with a heat/smoke alarm detection).

Test 2 – Beneath a nozzle (Activated with a glass bulb detection).

Where the thermocouples were positioned at 1.6m above the floor, the temperatures did not exceed 55°C for any 120 s interval, during test 1 & 2.

During tests 1 & 2 the external nozzle did not activate.

The system was supplied by yourselves on the 20th July 2021. [Warringtonfire](#) was not involved in any sampling or selection procedure.

These test result relates to an exploratory investigation which utilised the test methodology given in BS 8458:2015: Annex C. The information is provided for your information only and should not be used to demonstrate performance against the Standard nor compliance with a regulatory requirement. The test was not conducted under the requirements of UKAS accreditation.

If you require any further assistance regarding the interpretation of these test results, please do not hesitate to contact me.

Yours sincerely

DRAFT

T Kinder
Senior Technical Officer
Reaction to Fire Testing

DRAFT

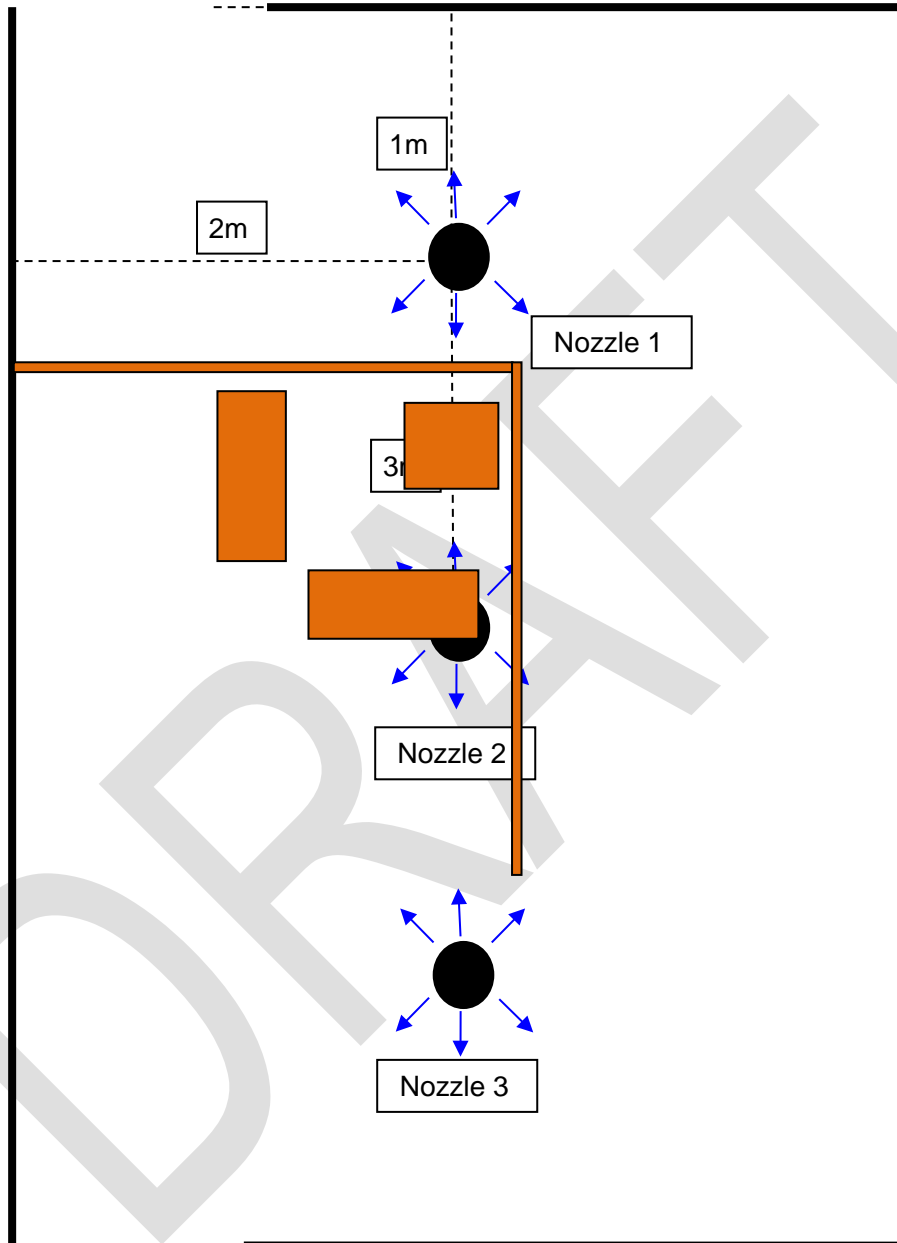
Observations during test of Test 1

00:01 Test start, the fire loads were ignited.

00:57 All Nozzles activated (Automatically after the signal from the Heat/Smoke alarm)

31:57 Test terminated.

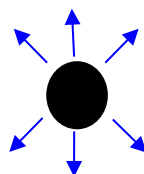
Test 1 layout



Key



Between, ignition and fuel package

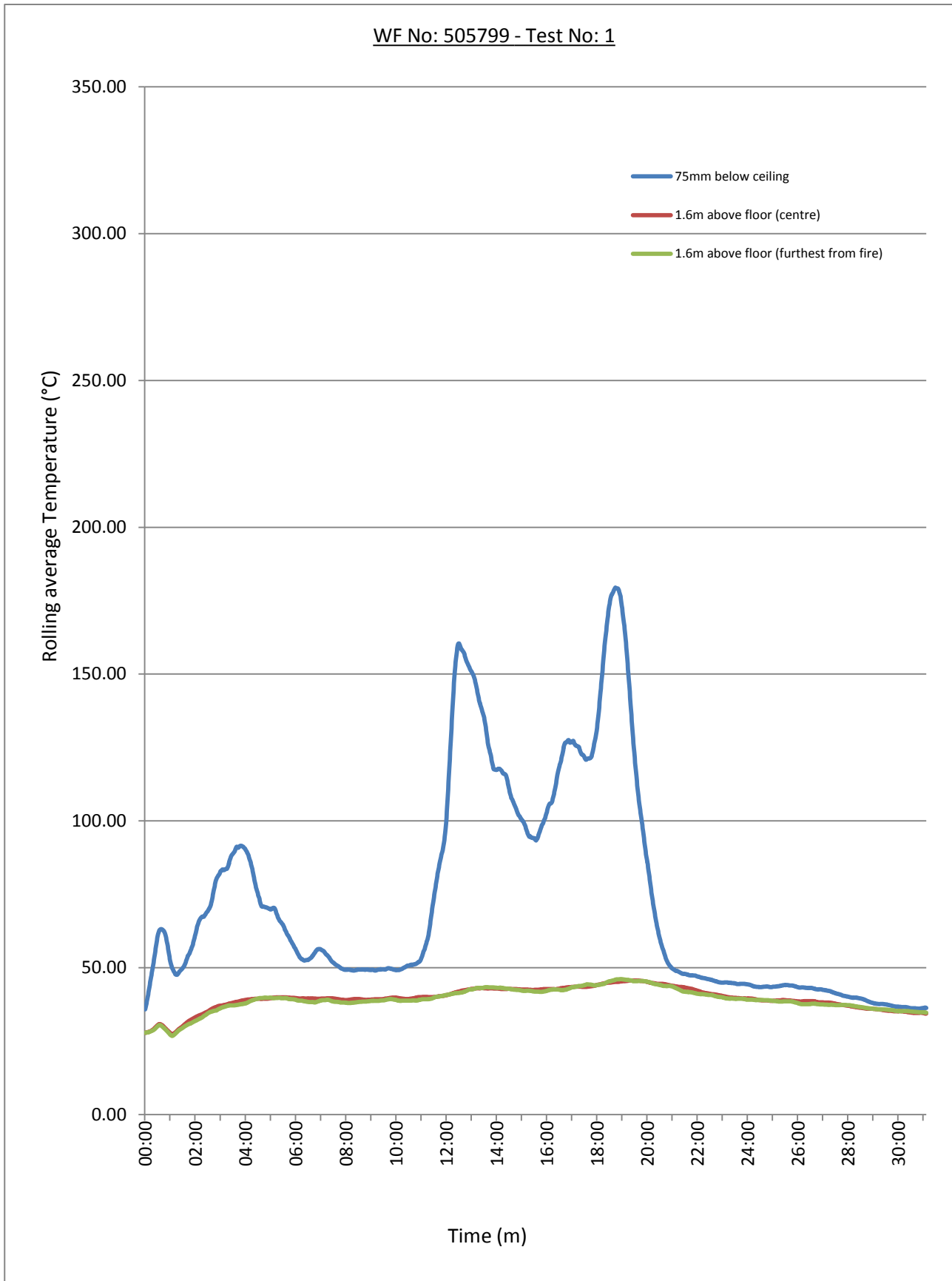


Nozzle (Inc. discharge angle)

Note 1: All nozzles are at the same spacing's as Nozzle 1

Drawing not to scale

Figure 1, Rolling average Temperature (°C)



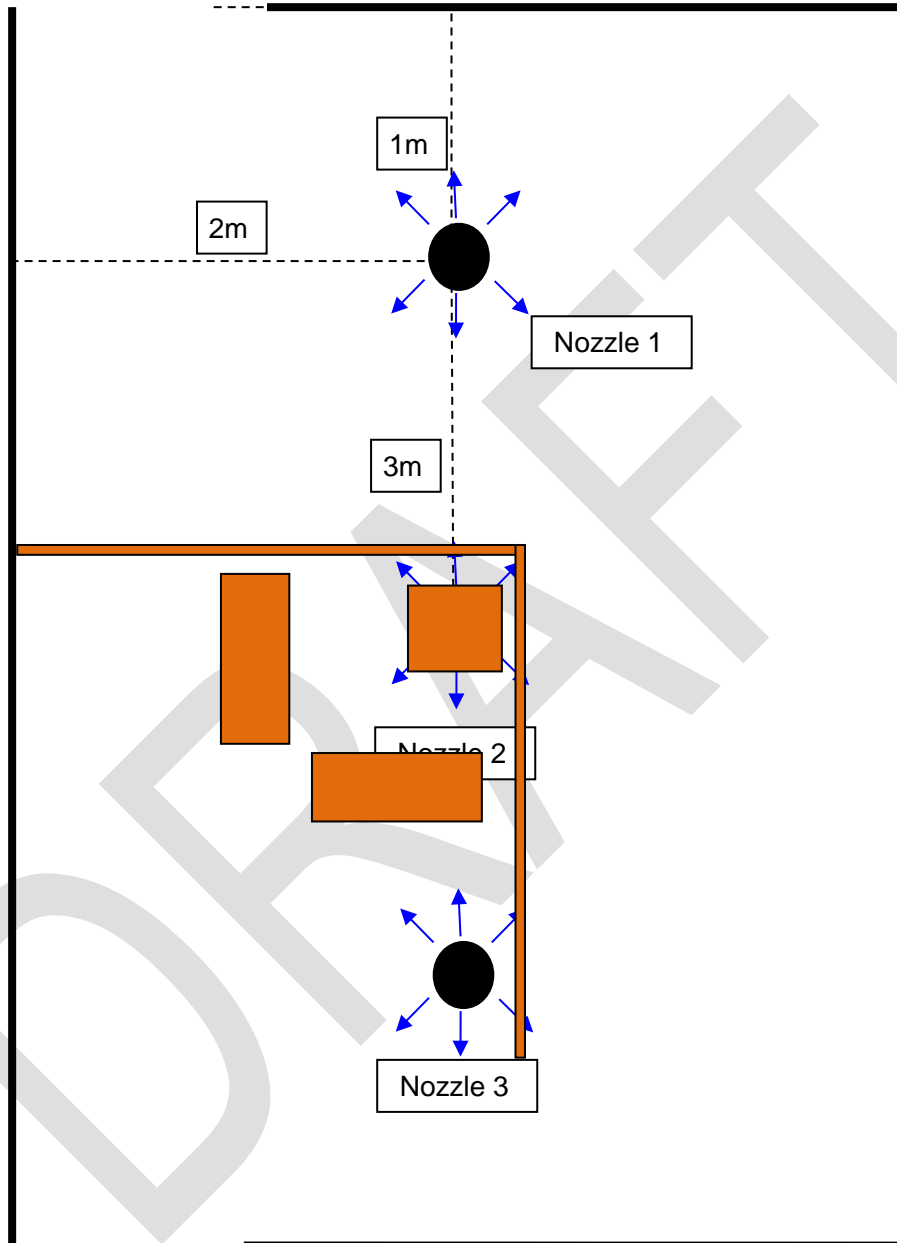
Observations during test of Test 2

00:01 Test start, the fire loads were ignited.

00:49 All Nozzles activated (Automatically after one of the glass bulbs popped)

31:49 Test terminated.

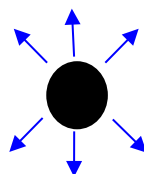
Test 2 layout



Key



Under, ignition and fuel package



Nozzle (Inc. discharge angle)

Note 1: All nozzles are at the same spacing's as Nozzle 1

Drawing not to scale

Figure 2, Rolling average Temperature (°C)

