



**SPECIFICATION FOR FIRE SAFETY &
SPECIFICATION FOR SOOTING BEHAVIOUR
TEST REPORT**

Date: 2nd October 2020
Reference: FST0006A
Customer: Rob Antoun
Candle Description: Cara Scents 30cl fragranced container candle
Wax: Soy
Fragrance: Orchid & Lotus Blossom
No. of candles: 3

TEST FACILITY: Candle Shack Ltd.
Unit A, West Carron Works
Stenhouse Rd
Carron
Stirlingshire
FK2 8DR

Part A: To record burning profile of test candles in a controlled environment and evaluate against requirements of BS EN 15493:2019 (Candles. Specification for Fire Safety)

Part B: To measure Soot Index of test candles in a controlled environment and evaluate against requirements of BS EN 15426:2018 (Candles. Specification for Sooting Behaviour)

SAMPLE SET PHOTOS



Black Candle



White Candle



Base Label

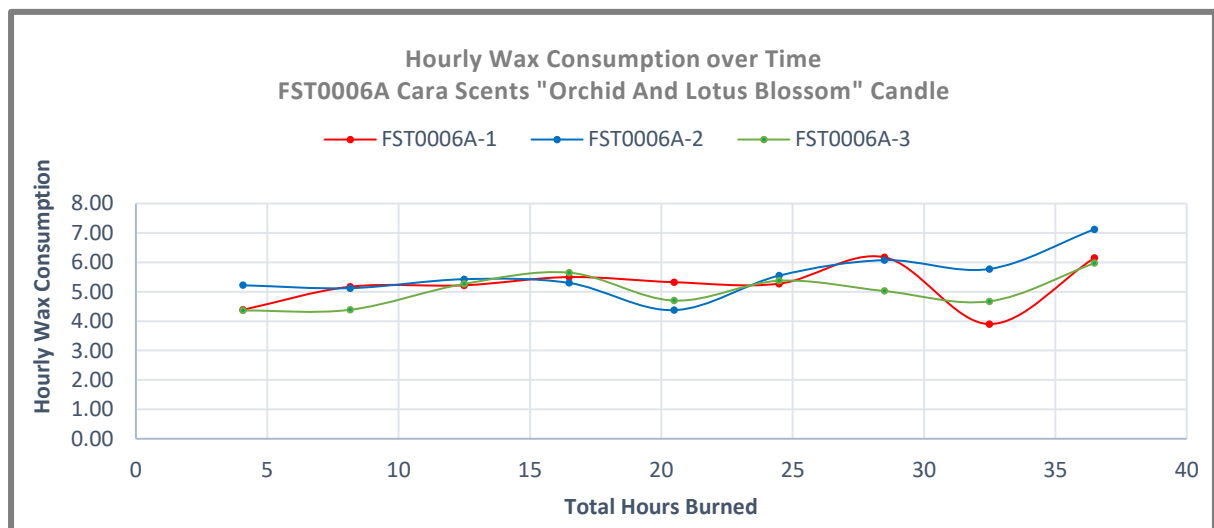
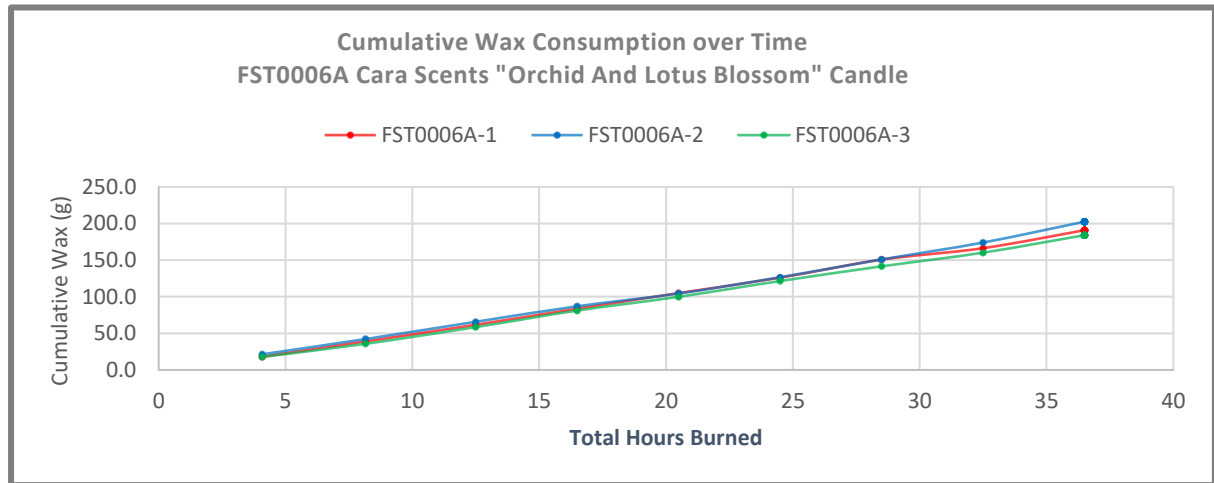
Part A: EN 15493:2019 (Candles. Specification for Fire Safety)

Test Reference	FST0006A		
Wax Colour	White		
Wick Type	Cotton		
No. of wicks	1		
Burning cycles	4-hour cycles, 1-hour pause		
TESTING PERFORMED			
Sample Ref	FST0006A-1	FST0006A-2	FST0006A-3
Gross Weight (g)	494.7	497.0	502.1
Stability (10° slope) *	Pass	Pass	Pass
Secondary ignition (no more than 10s)	Pass (none)	Pass (none)	Pass (none)
Maximum flame height (max 75mm)	20-25 mm	25-30 mm	25-30 mm
Re-ignition after extinguishing	Pass	Pass	Pass
Aftersmoke when extinguished (max 30s)	Pass (<10s)	Pass (<10s)	Pass (<10s)
Total wax consumed (g)	190.9	202.5	184.1
Total burning time (hours)	36.5	36.5	36.5
Burn Rate (g/h)	5.23	5.55	5.05
RESULT	PASS		

OBSERVATIONS

- Room temperature during testing was 18 - 25°C
- Two of the candles in the test set were presented in black candle glasses, and the third was in a white glass, but the labels were identical and all candles in the test set burned consistently

CHARTS



PHOTOS



FST0006A-1 12 hours



FST0006A-2 12 hours



FST0006A-3 12 hours



FST0006A-1 Flame



FST0006A-2 Flame



FST0006A-3 Flame

Part B: EN 15426:2018 (Candles. Specification for Sooting Behaviour)

TESTING PERFORMED			
Sample Ref	FST0006A-1	FST0006A-2	FST0006A-3
Total measuring time, t_m (h)	12.5	12.5	12.5
Soot Index, S_i	11.59	6.21	6.00
Soot Index per hour, S_{ih}	0.927	0.497	0.480
Average Soot Index from 3 samples (Acceptance criteria is $<1.0/h$)	0.634		
Result (PASS/FAIL)	PASS		

TEST NOTES

- Room temperature during testing was 18 - 25°C
- Total measuring time was 12h 30m.

Report authorised by:	David Barn
Position:	Head of Product Development
Signed	