

Ceramic Face Temperatures (approximates only)

The average temperature across the ceramic face of the burner was measured using an infrared pyrometer camera (model: Mikron M90-Q). This instrument is capable of measuring across a temperature range of 200-2000°C, but, unfortunately does not filter out flame emission.

Temperatures were taken by viewing the burner face under each stabilized flame. Taking measurements in this way will result in some inevitable distortion to the infrared radiation, from the targeted hot surface, as a consequence of flame spectral emissions and thus has resulted in the large error bars quoted below.

Swirl stabilized flames								
Flame	SM1	SM2	SMA1	SMA2	SMA3	SMH1	SMH2	SMH3
ave temp, (±150°C)	450	340	460	540	540	550	520	440