

Soneko IR Product Spotlight
Twin Tube Infrared Emitters

Twin tube infrared (IR) elements from Soneko IR, Inc., provide a cost effective solution for dryer lamp replacement. The gold reflector coating on the quartz reflects over 90% of incident energy back to the target. The twin tube emitter can be supplied with either a short or medium wavelength filament. The twin tube element with a short wave filament is shown in Figure 1.

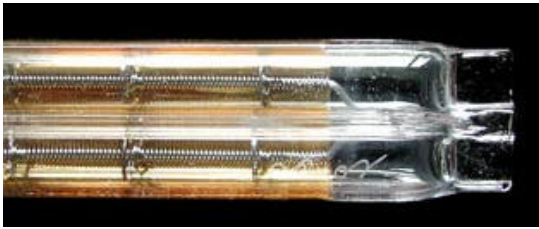


Figure 1- Twin Tube IR Emitter

Medium Wave Filament

The medium wave filament (IQH – see Figure 2) has heating rates in up to 50 watts/inch. In the twin tube configuration, the maximum heating rate is 100 watts/inch.

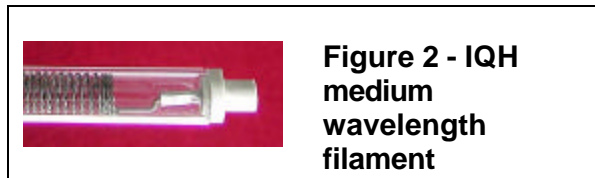


Figure 2 - IQH medium wavelength filament

The unique, patented filament design allows fast heat-up times of 6 seconds, as compared with 30 seconds for conventional quartz tubes. The IQH filament produces mostly medium to long wavelength IR (refer to Figure 3), with a filament temperature from 700 to 1000 °C (973 to 1273 °K). The IQH tube is for horizontal burn applications only. The filament wire is an iron/chromium/aluminum alloy that has a nearly constant resistance from room to operating temperature. Less expensive

distributed zero cross power controls can be used, which simplifies system CE approval.

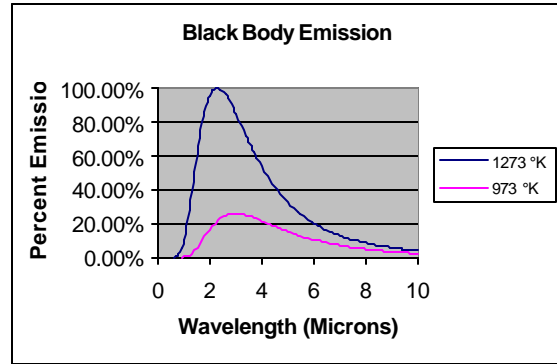


Figure 3 - Emission of IQH Filament

Short Wave Filament

The short wave filament is a helically wound tungsten filament encased in a quartz envelope (see Figure 4). The short wave element has a maximum heating rate of 100 watts/inch. In the twin tube configuration, the maximum heating rate is 200 watts/inch.



Figure 4 – Short wave filament

The filament allows fast heat-up times of 1 – 2 seconds. The filament produces mostly short to medium wavelength IR (refer to Figure 5). The typical filament temperature range is 1641 to 2227 °C (1914 to 2500 °K). Short wave filaments require a phase angle fired power control with soft start capability.

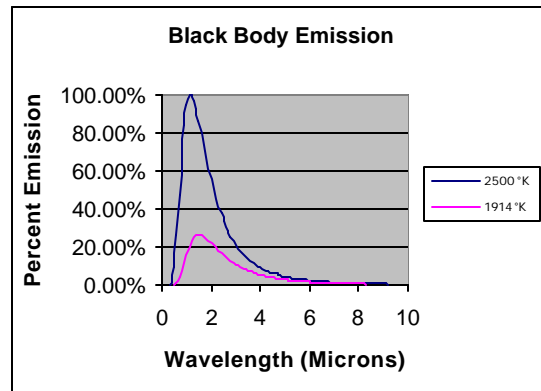
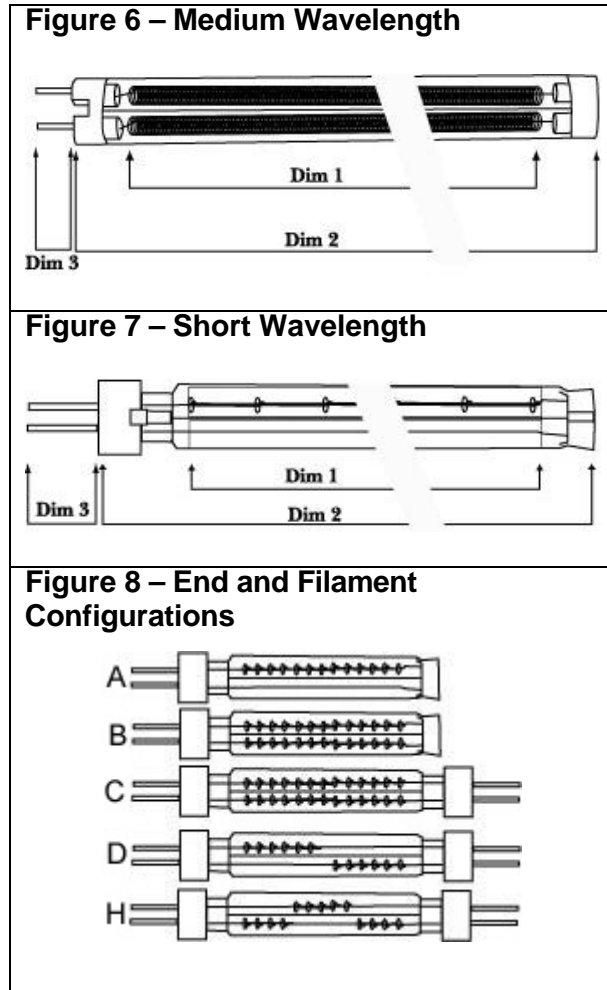


Figure 5 - Emission of Short Wave Filament

Twin Tube Infrared Heaters by Soneko IR

Product Configurations

Twin tubes are made custom for each application. Specify length, voltage, wattage, and dimensions. Figures 6, 7, and 8 show the dimensions and end configurations to specify.






	Rapido™ 100 watt/inch, medium wave lamp
	Ruby Red short wave IR lamp
	IQH medium wavelength IR emitters

Figure 9 - Other Lamps by Soneko, IR

Contact Gene Barisonek regarding your heating process requirements by phone (732-271-1710) or via email (gene@soneko.com).

Other lamps by Soneko, IR

Soneko, IR produces a full line of infrared emitters in short and medium wavelength emissions. Refer to Figure 9.