



Figure 76
Plasma lighting architecture consists of two fundamental parts:

- *Emitter: A quartz lamp embedded in a ceramic resonator*
- *Radio Frequency (RF) Driver: A solid-state RF generator and micro-controller*



Figure 77

Other manufacturers are providing similar light sources and common use luminaires.

3.0 Electric Light Source Characteristics

There are a number of key properties of lamps that need to be considered when choosing which lamp is right for a particular application. The following Chapters list these properties.

3.1 Luminous Flux

In any lighting application the amount of light that is needed is a key decision that has to be made. From this it is then possible to work out how many lamps of given rating are needed. There are lamps with lumen outputs less than 1 lumen through to lamps with outputs in excess of 200,000 lumens. In most applications, it is the average maintained illuminance that is important so it is important to consider the lumen maintenance through life at the same time as the initial luminous flux.

3.2 Power Demand

It is important in any lighting scheme to know what the total power demand is going to be so that the electrical infrastructure can be correctly designed. The power consumed by the lamp is important. However with many lamp types it is important also to consider the impact of the control gear as well. In most cases it will be the total circuit watts that are important rather than the lamp wattage.