JKL COMPONENTS CORPORATION

TECH BRIEF

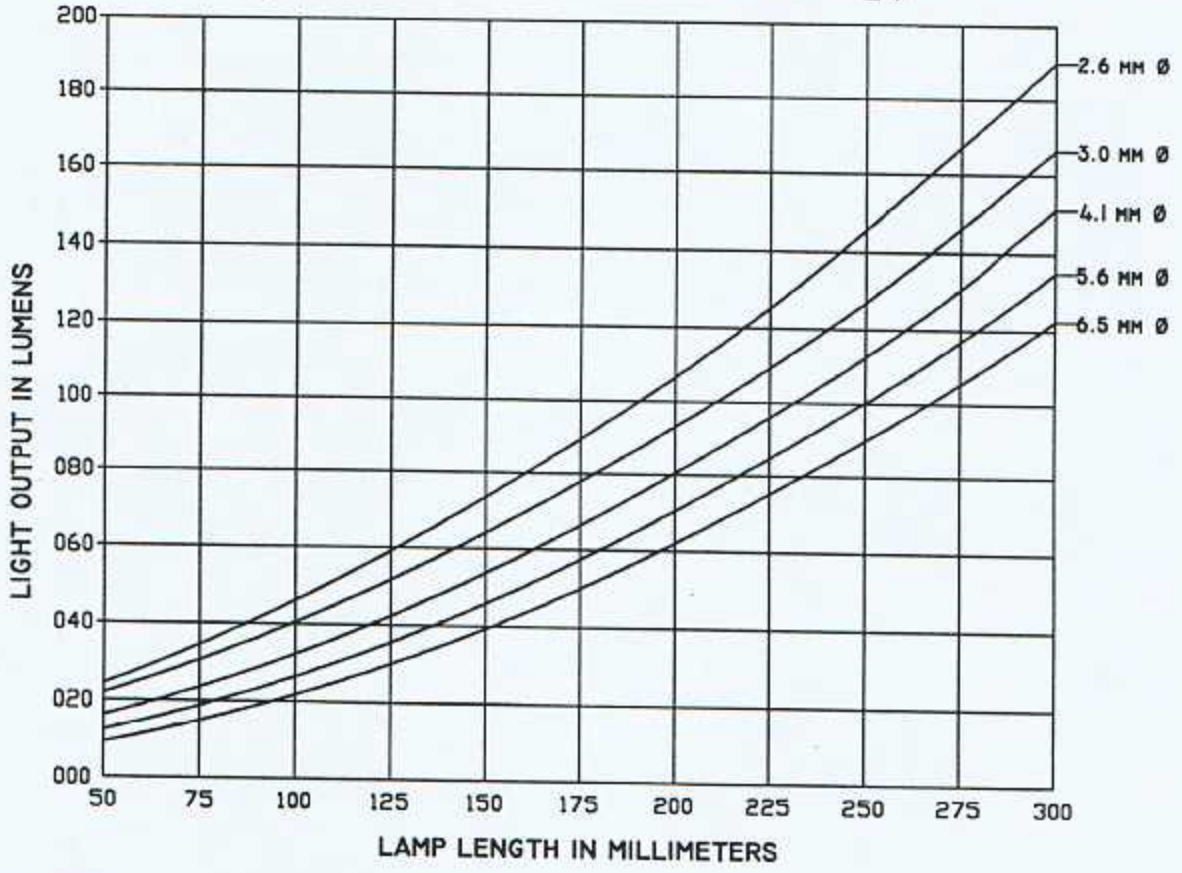
ESTIMATING CCFL LUMENS

Specifications for cold cathode fluorescent lamps typically state the intensity in Candelas per Meter Squared (Cd/m2). Sometimes, especially when comparing the light output between different types of lamps, the total Lumens (lm) or output flux available is desirable. The chart below can be used to estimate the total Lumens (lm) for various CCFL diameters and lengths. This chart was developed by a random sampling of JKL products operated with a constant current of 5ma RMS at 25°C. The product of the linear regression line for both the measured lumens per watt (lm/w) and watts per mm (w/mm) are shown for the 2.6 mm Ø through 6.5 mm Ø lamps.

These results are intended for rough estimation only, and it must be realized that actual results may vary do to external (temperature / drive current) and internal (gas pressure / phosphor type) influences.

Lumens (lm) may be converted to Mean Spherical Candle Power (mscp) as shown below:

$$lm / 4\ pi = mscp$$
$$(87\ lm / 12.57 = 6.922\ mscp)$$



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