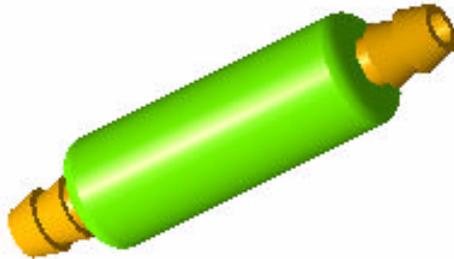
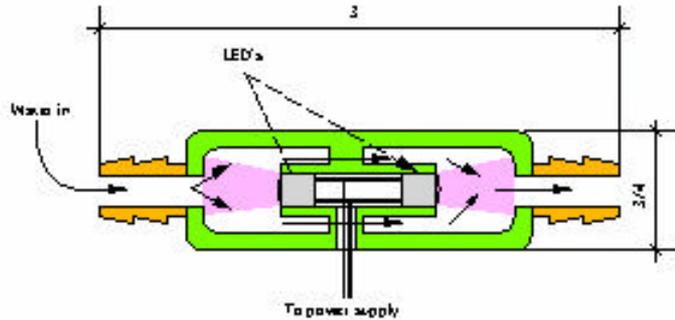


Ultraviolet LED-Based In-Line Water Purification Module



OBJECTIVE:

- Develop a compact UV water purification module for use by individual troops in the field. The module will be used in conjunction with hydration pack systems and will purify drinking water on demand. The in-line device will capitalize on recent advances in the field of ultraviolet light emitting diode (LED) technology.

PAYOFF:

- Destroys 99.99% of Bacteria, Viruses, Protozoa
- Fast, Small, Lightweight, Rugged
- Economical and Long Lasting
- Non-chemical, Adds No Taste or Toxicity
- Easy to Use, Install and Remove

TECHNICAL CHALLENGES:

- Improve LED quantum efficiency
- Establish operating parameters
- Optimize mechanical and electro-optical design

TECHNICAL APPROACH:

- Incorporate reflective and refractive optics for maximum power extraction and optimal flux concentration
- Perform radiometric, microbiological and mechanical testing to guide and confirm design effort

PERFORMERS: Hydrophoton, Inc

2004 Schedule:

	1st Qtr.	2nd Qtr.	3rd Qtr.	4th Qtr.
Proof of Concept	[Blue bar]			
Bench Level Prototype		[Green bar]		
Pre-Production Prototype			[Yellow bar]	
Production Prototype				[Red bar]

TRANSITION: Marine Corps Systems Command (IWP)