

## THE TECHNOLOGY

Self luminous lighting technology, also known as radioluminescence, uses, as its name suggests, radioactive decay to produce light. Self-luminous signs are illuminated by sealed glass tubes, filled with radioactive tritium gas (Hydrogen-3) and coated with a phosphor. The tritium gas emits low level radiation as beta rays, or electrons, which strike the phosphor, continuously stimulating it to produce light. Depending on the phosphor used, many different colors of light can be produced. Green is usually preferred for exit signs. In fact, radioluminescent lighting works exactly like fluorescent lighting, except that radioactive decay rather than an electrical current provides the source of energy.

At first, some consumers are deterred by the radioactive content of our products. All the radiation in our products is contained in fire-proof, vandal-proof compartments, and thus users are never exposed to even a trace of it. It is also important to note that the amount of radiation contained in our products is less than that contained in most basements due to radon. In fact, even if a sign were somehow to break in a small sealed room, the radiation present would be low energy, and at concentrations deemed harmless. Annual exposure to radiation in major cities, by medical x-rays, in airplanes, and by cigarette smokers is greater than the entire radioactive content of even our brightest products, and even these every-day exposure levels are considered safe by the Nuclear Regulatory Commission.

Remember, thanks to radioluminescence, you can also save lots of money on your energy bills. Our products require no electricity, no wiring, no maintenance, no bulbs, and unlike photoluminescent (glow-in-the-dark) products, they do not even require sunlight exposure to "recharge" them.

*Disclaimer: Because radioluminescent products are regulated by the Nuclear Regulatory Commission, it is unlawful to dispose of them along with standard municipal waste. Please contact Self-Lume, Inc. for important disposal information.*

## CREDITS

[www.firstdefense.com/html/lumatec\\_international.htm](http://www.firstdefense.com/html/lumatec_international.htm)  
[www.isolite.com](http://www.isolite.com) (and various pages within)  
[www.koreantraders.co.kr/Lumion/lumion2.htm](http://www.koreantraders.co.kr/Lumion/lumion2.htm)  
[www.permaglo.co.uk](http://www.permaglo.co.uk)  
[www.cis.state.mi.us/opla/erd/epic/epic4b.htm](http://www.cis.state.mi.us/opla/erd/epic/epic4b.htm)  
[www.nrc.gov/NRR/DAILY/980820dr.htm](http://www.nrc.gov/NRR/DAILY/980820dr.htm)  
[www.lrc.rpi.edu/nlpip/online/SR/Srexit.pdf](http://www.lrc.rpi.edu/nlpip/online/SR/Srexit.pdf)

## COMPANY CONTACT INFO

# SELF-LUME, INC.

Enlightening The  
World.



## THE COMPANY

(SOURCE: ISOLITE CORPORATION, ISOLITE.COM)

Self-Lume, Incorporated was founded in 1980 to produce and distribute Self-Luminous Safety Signs. Throughout our history, Self-Lume has been a pioneer in the field of radioluminescent compounds. These non-electrical light sources have been used for more than 50 years in the aviation industry and in military applications where reliability is absolutely essential.

Continuous research and development in this highly specialized field led to the current generation of products developed to meet the needs of today's energy conscious users while providing the most dependable emergency lighting source available. Our catalog line has grown from the original exit and accessibility signs to literally dozens of useful and innovative products.

These self-luminous products are unique. They require no external power or batteries, no maintenance and are always on. Our signs have successfully passed the most rigorous ANSI N-540 tests for structural integrity before being approved and licensed by the Nuclear Regulatory Commission. In addition, they meet or exceed the standards of all appropriate regulatory bodies including Underwriters Laboratories 924 Standard for emergency lighting, The National Fire Protection Association's Life Safety Code 101, the Building Officials and Code Administrators (BOCA), the International Conference of Building Officials (ICBO) and the City of Los Angeles. When all else fails, Self-Lume Self Luminous products work!

## OUR PRODUCTS

### EXIT SIGNS

Our fantastic line of exit signs meets or exceeds all federal safety standards for brightness, durability, fire-resistance, and readability. Also, because they require no electricity and no maintenance they can save you money. Not convinced? Here's the math to prove it:

(all data courtesy of isolite.com)

	<b>INCANDESCENT</b>	<b>FLUORESCENT</b>	<b>LED</b>	<b>SELF LUME</b>
Lamps	2 lamps/3,000 hr	2 lamps/10,000 hr	LEDs/200,000 hr	None
Power Consumption	40 Watts	21 Watts	6 Watts	0 Watts
Fixture	80	120	170	240
Installation Cost	80	80	80	15
<b>INITIAL COST</b>	<b>160</b>	<b>200</b>	<b>250</b>	<b>255</b>
<b>+ 10 YEAR COSTS</b>				
Electricity	350	184	53	0
Replacement Bulbs	300	144	0	0
Replacement Batteries	220	220	40	0
Replacement Labor	265	85	20	0
Inflation Cost	389	160	15	0
<b>TOTAL 10 YEAR COST</b>	<b>\$1684</b>	<b>\$993</b>	<b>\$378</b>	<b>\$255</b>

### PERMA-TORCH™

The Perma-Torch is the always-on flashlight that never requires batteries or charging! It provides a continuous adjustable-width beam of low-level green-tinted illumination, perfect for reading documents, maps, and charts on the go.



### MAP LIGHT

With its illuminated magnifying lens, our self-luminous map light makes it easier than ever to figure out where you are going. Whether in the car or in the woods, this lightweight tool is a must-have for every traveler.

### GLOW SHAPES

We make self-luminous strips in a variety of shapes and sizes to meet your needs. From arrows that point the way at night to large, easy-to-read house numbers and seat numbers for theatres, we have something to make everyone's life easier.



### MILITARY/WEAPONRY PRODUCTS

We manufacture an extensive collection of high-quality products for everyone from the

Our exit signs are available with a variety of different options to meet your needs.

*FACE COLOR:* Red or Green

*USEFUL LIFE:* 10, 15, or 20 years

*# OF FACES:* Single or Double

*FRAMES:* Black or White Plastic, or Aluminum Vandal-Resistant Frame

We also manufacture a variety of other self-luminous signs including:

To make the world's best emergency sign, we had to leave a few things out...



NO wiring  
NO electricity  
NO maintenance  
NO lamps to replace



novice hunter  
to the military  
night-sights, gun sights, aiming posts, personnel night identification, portable runway and covert lighting, waterway buoys, and navigational markers.

sergeant Our long list of items includes



### CHRONOGLO™

Our line of rugged, self-luminous watches are unbeatable. They are manufactured to withstand a beating and remain water resistant to depths of 200 meters. They contain the most accurate Swiss-quartz movement. They are available in a wide variety of styles for a wide variety of budgets, with metal, nylon, leather, or plastic bands, and both men's and women's face sizes. And, of course, like all of our self-luminous products, they glow 24 hours a day without the aid of sunlight or batteries.

### HOUSEHOLD HELPERS

With Self-Lume's line of household products, it's now possible for anyone to set their house aglow, gaining convenience without spending lots of money. We manufacture phones with illuminated buttons, light switches that are easy to find in a dark room, and small wall fixtures to guide the way through a dark house.

