E/T (Everything/Tactical) Lights

Southwest Synergistic Solutions, LLC
CAGE Code 64U68
Small Minority owned business
956-645-5265
jc@everythingtactical.com

E/T LIGHT
EVERYTHINGTACTICAL.COM

All FOUR Colors In One Light
What are E/T Lights?

- E/T Lights were developed at the request of a JSOC combat medic. The issue was carrying too much gear (4 bags of chemical lights). What he needed was a one-handed operation device that contained all the triage colors.
- E/T Lights combine 4 colors in one device. IR/R/G/B or R/Y/G/B.
- E/T Lights function in all austere environments & are combat proven.
- E/T Lights are a multi-use illuminated marker that make great augmentation to one time use chemical lights.
- E/T Lights are included in UA’s 269C & 1374
- E/T Lights are preferred by soldiers 63% vs. 37% for chemical lights (US Army report).
- E/T Lights are easily attachable to helmet straps, MOLLE, equipment, etc...
- E/T Lights can be turned off if needed, chemical lights cannot.
JIFX 17-3 E/T Light vs. Chemlight experiment findings

• Chemical lights (6” Green only) are utilized for ~52,960,508 tasks per year.

• Chemical lights freeze and won’t function properly at temperatures below 32 degrees F.

• Chemical lights (6” Green only) generate ~2,889,525 lbs. of plastic/chemical waste per year.

• Chemical lights (6” Green only) generate ~103,438 cubic feet of plastic/chemical waste per year.

• Chemical lights must be completely spent even though only a few minutes of use may be required. Wasted capability.

• Chemical lights are more expensive per hour of actual use. See following chart
• Chemical lights weigh more for the same 4 color capability.

Red 223.2g vs. 43.2g
Yellow 257.92g vs. 43.2g
Green 456.32g vs. 43.2g
Blue 706.8g vs. 43.2g

• Chemical lights take up more volume for the same 4 color capability.

Red 30.375 cubic inches vs. 3.3955 cubic inches
Yellow 35.1 cubic inches vs. 3.3955 cubic inches
Green 62.1 cubic inches vs. 3.3955 cubic inches
Blue 96.1875 cubic inches vs. 3.3955 cubic inches
JIFX 17-3 Stakeholder Comments

Stakeholder Evaluation(s):

Do you consider yourself to be a Subject Matter Expert?

1. Yes
2. No
3. Yes
4. No
5. No
6. Yes
7. No

Is this Experiment Relevant?

1. Yes
2. Yes
3. Yes
4. Yes
5. Yes
6. Yes
7. Yes
What Areas of the RFI does this experiment relate to?

2. No response
3. I2. Deployable Lighting Technologies
5. F1. Non-combatant Evacuation Operations (NEO)
Additional areas not listed above?

1. No response
2. No response
3. No response
4. No response
5. No response
6. Rapid visual patient tracking, marking for night operations, friendly troop
7. No response

How much of an improvement is this technology over existing solutions?

1. High
2. Medium
3. High
4. Medium
5. High
6. High
7. High
What are the observable strengths of this technology?

1. Physical Size, Physical Weight, Physical Robustness, Cost of Unit/System, Other
2. No response
3. Physical Size, Physical Weight, Power Requirements, Operating Endurance, Scalability to Multiple Units/Users, Ease of Integration
4. Physical Robustness, Operating Endurance, Usability/Intuitiveness, Complies with Existing Standards
5. Physical Size, Physical Weight, Physical Robustness, Power Requirements, Operating Endurance, Usability/Intuitiveness, Training Requirements
6. Physical Size, Physical Weight, Physical Robustness, Speed of Deployment, Usability/Intuitiveness, Scalability, Ease of Integration
7. Physical Size, Physical Weight, Physical Robustness, Power Requirements, Operating Endurance, Resilience to user during failure conditions, Speed of Deployment, Usability/Intuitiveness, Training Requirements, Scalability, Ease of Integration, Ability to operate in isolation
Additional strengths not listed before?

1. With this unit, the need to use 4-8 chemlights per CRRC per day over a 2 week training package could make a huge difference in money, weight, and overall space used for transportation.
2. Better visibility, longer life, reusable, less waste
3. No response
4. No response
5. No response
6. No response
7. No response

Does this experiment represent a new approach to bridging a capability gap?

1. No
2. Yes
3. No
4. No
5. Yes
6. Yes
7. Yes
Did the experimenters modify current technology for a new application?

1. Yes
2. Yes
3. Yes
4. Yes
5. No
6. Yes
7. Yes

Did the experiments collaborate with other experiments on a potential solution?

1. No response
2. No response
3. No
4. Yes
5. No
6. Yes
7. Yes
1. No response
2. So these comments just apply to the LED lights in general for both G-1 and I-1. Clearly these lights are better quality than the chem lights currently used. The fact that they have long battery life and can be turned on and off makes them a no brainer.
3. Lights can coexist with chem lights. Cannot replace chemlight but can help supplement the use of chem light would be good for repeated task where you could collect the light at a later time.
4. No response
5. This item wont fully replace chem lights, but there are multiple situations where small reusabld lights would be useful, such as: in amphib ops, marking lines in a FOB, as a buzzsaw for marking an LZ.
6. Great product w a growing listof uses. Would like to bring down to Camp Pendleton for use at 1st Recon Bn for use/integration during a reconnaissance and amphibious package.
7. Very practical improvement over Chem lights in brightness, endurance and form factor. Potentially superior in terms of cost and environmental impact as well.
Extended Ground-Based Visibility Evaluation
Everything Tactical (E/T) Lights

The following test in an extension of the report titled “In-Situ Evaluation of the Southwest Synergistic Solutions E/T (Emergency/Tactical) Light” previously completed as a part of the Defense to Response (D2R) Program. Stage II of this report evaluated the ground-based visibility of the E/T Light against several brands of chemical lights. The following test report re-created the variables of the first, but with a distance comparison of the top four competing products to the E/T Light. Please refer to the included testing document for all details regarding the first phase of product testing.

This test extension was executed on November 27th, 2018 evaluation, occurred at night at a remote, rural site in College Station, Texas. This location, a construction site for a new roadway, was selected due its flat, straight line visibility with minimal ambient light. Figure 1 shows a picture of the selected site during the daylight.

Figure 1

- Lazer-Brite
- Night Eye
- V-Light
- Bright-Strike
Conclusions
For all colors the E/T Lights overall had more positive visibility identifications than the competitors tested against it. This was especially evident at greater distances and longer activation times.

E/T Light - It can be seen from each chart that the E/T light is able to maintain slope value closest to zero of all the competitors, meaning that as the E/T Light is left on for up to 72 hours it remains visible.

<table>
<thead>
<tr>
<th>E/T Light Slope</th>
<th>300ft</th>
<th>900ft</th>
<th>1/4 Mile</th>
<th>1/2 Mile</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-0.0125</td>
<td>-0.0125</td>
<td>-0.08333</td>
<td>-0.0875</td>
</tr>
</tbody>
</table>
Closing

• E/T Lights offer an improvement over current options for the capabilities.
• E/T Lights lesson the weight and volume over the options for the current capabilities.
• E/T Lights reduce the cost over other options for the current capabilities.
• E/T Lights reduce the logistical costs related to chemical lights
• E/T Lights are a greener alternative to currently over-used chemical lights.
• E/T Lights function in all austere environments. Our warfighters should be equipped with tools that function at freezing temperatures. During winter warfare the current chemical lights will not function
CAPABILITY STATEMENT

Southwest Synergistic Solutions, LLC designs, manufactures and sells warfighter field equipment based on expressed needs and feedback from warfighters. We manufacture two products (E/T Lights and Compass Light) and represent another (S-Cuts).

The E/T Lights combine four colors in one durable, long lasting, combat proven device. Designed to improve on chemical light technology, the E/T Lights accomplish the following when utilized to augment chemical light use for common repetitive tasks:

- Reduce weight for capability up to 95%
- Reduce volume for capability up to 97%
- Reduce plastics/chemical waste by over 2 million pounds per year.
- Reduce chemical light stick budget by over 90% (keep chemical lights for truly crack and forget tasks, utilize reusable E/T Lights for common repetitive tasks)
- E/T Lights function in all austere environments, chemical lights freeze and do not function.
- E/T Light turned off in emergencies
- Reduce need to resupply one time use chemical lights. Lesson logistical costs & burden.
- Bring cost per use down to 1 cent to 4 cents per hour vs. cracking the $1.50+ chemical light every time
- Reduce disposal costs associated with chemical lights.

E/T Version 6.8A – NSN 6230-01-605-9650
E/T Version 6.8IR – NSN 6230-01-605-9635

DLA Medical DAPA contract SP0200-1-H-0064 (E/T Lights), & SP0200-19-H-0005 (S-Cuts)


E/T Light are designated a "Qualified Anti-Terrorism Technology (QATT)". Vetted by DHS, "Safety Act" program.

E/T Light are MIL-STD 810 tested, Army APG lab & MIL-STD 810 (Explosive Atmosphere) tested.

Included in Army Medical kits UA269C, UA1374

Compass Lights – Built for very specialized community.

SSS, LLC represent S-Cuts line of clothing removal, emergency cutout tools in the U.S.
- S-Cuts improve on shears & cutout rippers. When tested, the S-Cuts were 4X faster than shears and 2+ times faster than cutout rippers.
- Reduce weight & volume for the capability, while improving patient safety and getting them out much faster.
- NSN 6515-01-668-7095 – Model501/red
- NSN 6515-01-668-7090 – Model 701/red
- NSN 6515.01-668-5393 -Model QE black
- Other NSN issued for ACP Kit & QE blue

NIACS E/T & Compass Lights – 335129, 423610
S-Cuts – 423450, 423710

Small minority owned business, State (Texas, SCTRCA) certifications: ESBE, HABE, MBE, SBE, HUB

Contact: Juan Clefuegos, managing member jc@everythingtactical.com, 956-645-5265
QUESTIONS: