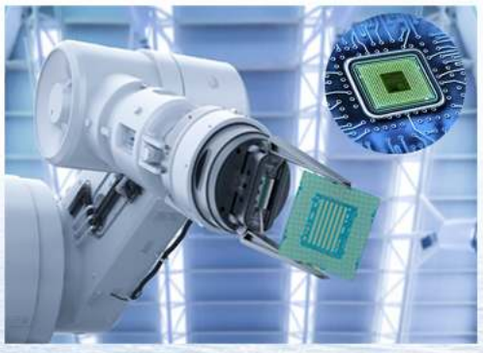
ALFA1 TRI-PROOF Explosion Proof LED Light System, MIL-EPRL

ALFA1 Products Designed with Ai

MARINE, DEFENSE, & INDUSTRIAL LED EXPLOSION PROOF LIGHTING SYSTEMS



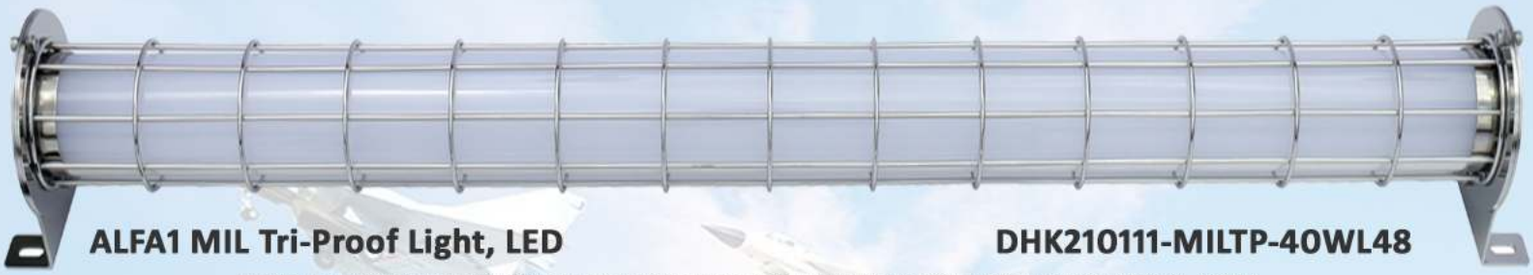
DHK GROUP
23232 Peralta Drive,
Laguna Hills, California 92653

P.O. Box 6963,
Laguna Niguel California 92607
TEL: (310) 728-6171
(949) 332-0755
Email: info@GreavesInc.com
DHKDefense@dhki.com
www.GreavesInc.com

ALFA1 TRI-PROOF Explosion Proof LED Light System, MIL-EPRL

ALFA1 Products Designed with Ai

PROUDLY ASSEMBLED IN USA



ALFA1 MIL Tri-Proof Light, LED **DHK210111-MILTP-40WL48**

FOR DETAILED TEST REPORT, PLEASE REFER TO QTR DHK-TT69-40W

ALFA1 MIL Tri-Proof Light, LED **DHK210111-MILTP-20WL24**

FOR DETAILED TEST REPORT, PLEASE REFER TO QTR DHK-TT69-20W

Equipment described herein may require US Government authorization for export purposes. Diversion contrary to US Law is prohibited. The descriptions of our products and systems are published for informative purposes only and does not constitute and offer to sell. DHK Group reserves the right to change specifications without notice.

Our products are innovative, rugged and offers economical and custom solutions to our forces & industry.

GREAVES INC
DHK Group

Laguna Hills, California 92653
Email: DHKDefense@DHKI.com,
Tel: (310) 728-6171

www.GreavesINC.com
www.DHKI.com

ALFA1 TRI-PROOF Explosion Proof LED Light System, MIL-EPRL

ALFA1 Products Designed with Ai

PROUDLY ASSEMBLED IN USA

ALFA1 MIL Tri-Proof Light, LED
DHK210111-MILTP-40WL48

- Rugged design and manufactured to Military specs & Federal standards and other applicable standards as guidelines.
- Designed and manufactured for Military, Marine and Industrial applications.

Industrial Applications

Military Applications

Petrolium Refinery Applications

- Designed to withstand extreme low & high temperature environments - 30°C to 50°C (-22°F to 122°F)
- Salt and Fog IAW MIL-STD-810G
- Sand & Dust IAW MIL-STD-810G
- Compliance with IP69K & IK10
- No Mercury, No UV and No IR
- Long Life Cycle with (5) Years Warranty

Note: Our products are designed to specifications and standards outlined above as guidelines and qualification tests IAW, QTP, & QTR may be scheduled at a later date.

ALFA1 MIL Tri-Proof Light, LED
DHK210111-MILTP-20WL24

Equipment described herein may require US Government authorization for export purposes. Diversion contrary to US Law is prohibited. The descriptions of our products and systems are published for informative purposes only and does not constitute and offer to sell. DHK Group reserves the right to change specifications without notice.

Our products are innovative, rugged and offers economical and custom solutions to our forces & industry.

GREAVES INC
DHK Group

Laguna Hills, California 92653
Email: DHKDefense@DHKI.com,
Tel: (310) 728-6171

www.GreavesINC.com
www.DHKI.com

ALFA1 TRI-PROOF Explosion Proof LED Light System, MIL-EPRL

ALFA1 Products Designed with Ai

DHK Group have been developing replacements for fluorescent units which are ill-suited to harsh military environments including but not limited to salt & Fog, Sand & Dust, High & Low Temp, Shock & Vibration etc. The inherent advantages of LED based lighting systems are very low energy consumption, long term reliability, superior lighting performance of up to 50,000 hours MTBF, energy saving, and through-life cost effectiveness are universally accepted.

Innovative design of both the casing and all other components are manufactured with the use of military specifications compliant corrosion resistant 304 Stainless Steel and aerospace quality aluminum materials which enables us to produce the latest universal voltage 110-270VAC military hardened LED Lighting systems for military operational rugged and marine environments.

The US Navy and other armed forces are moving to Solid State Lighting (SSL) with very long-life LEDs for its inherent proven reliability and requires practically no maintenance and significantly reduce operational cost. ALFA1 state of the art technology LED lighting systems avoid all the drawbacks of traditional lighting, such as the relatively short life of Incandescent bulbs, the too long warm up for HSP lights, and the mercury content in fluorescent lights. Its also important to note that ALFA1 LED Lighting systems also are backwards compatible with existing lighting solutions.

EMI emissions are IAW with MIL-STD 461E and units are sealed to IP67 and complaint to MIL-STD 810 environmental requirements. ALFA1 MIL Tri-Proof Lighting, LED systems are designed IAW MIL-DTL-16377, MIL-STD-461, MIL-STD-1399, MIL-STD-454, MIL-STD-105, MIL-STD-130 and other applicable specifications as guidelines.

Note: Our products are designed to specifications and standards outlined above as guidelines and qualification tests IAW, QTP, & QTR may be scheduled at a later date.

At the completion of 100% performance & exceptance testing IAW ATP, the product is serialized and ID Plateis installed with 2x M2 Screws for product quality and warrenty controlled

Equipment described herein may require US Government authorization for export purposes. Diversion contrary to US Law is prohibited. The descriptions of our products and systems are published for informative purposes only and does not constitute and offer to sell. DHK Group reserves the right to change specifications without notice.

Our products are innovative, rugged and offers economical and custom solutions to our forces & industry.

GREAVES INC
DHK Group

Laguna Hills, California 92653
Email: DHKDefense@DHKI.com,
Tel: (310) 728-6171

www.GreavesINC.com
www.DHKI.com

ALFA1 TRI-PROOF Explosion Proof LED Light System, MIL-EPRL

ALFA1 Products Designed with Ai

PROUDLY ASSEMBLED IN USA

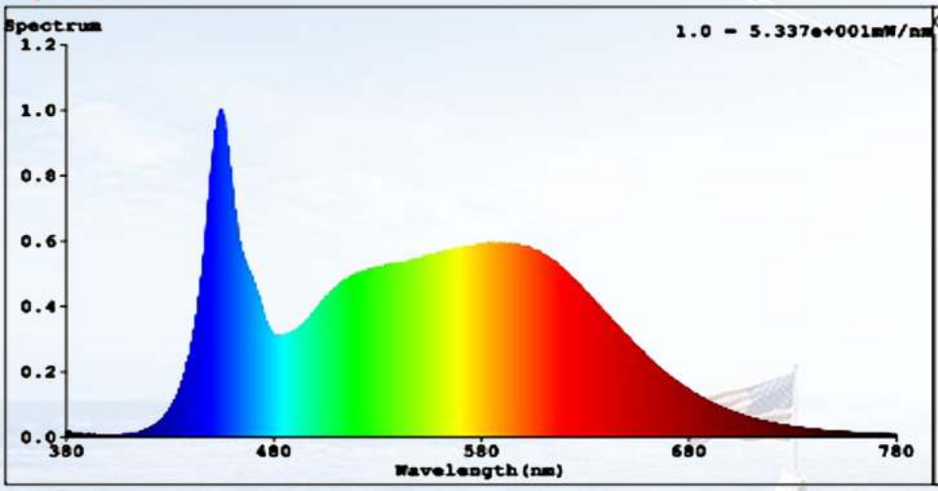
SPECTRUM TEST

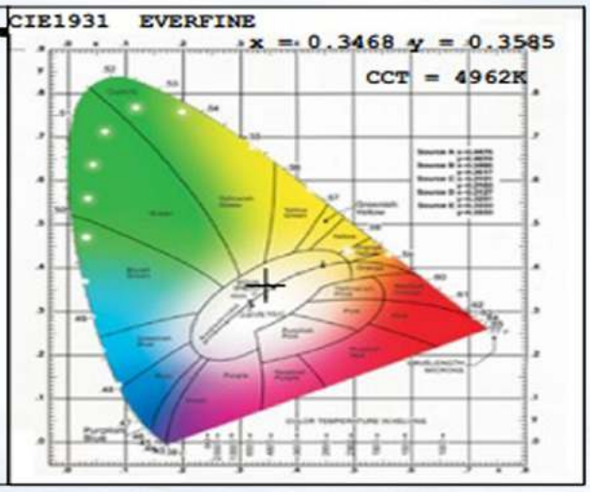
Sample	:	Date	: 2022-09-19
Specification	: **DHK-TT69-20W**	Standardtus	:
Sample No.	: **100-1X**	Instrument	: HaasSuite(EVERFINE)
Manufacturer	:	Test by	: Jarvis
Remark	:		

Test Condition

Temprature	: 25.4Deg	RH	: 54.3%
WL Range	: 380nm-780nm	IP	: 49458 (75%)
Test Mode	: Fast Test	T	: 71 ms
Sensitivity	: High		

Spectrum





Colorimetric Parameters

Chromaticity Coordinate: x = 0.3468 y = 0.3585 / u' = 0.2099 v' = 0.4883 (duv=2.78e-03)

CCT= 4962K Prcp WL: Ld=570.7nm Purity=11.6%

Peak WL: Lp=454nm FWHM: =23.1nm Ratio:R=16.3% G=78.5% B=5.1%

Render Index: Ra = 86.5

R1 =86	R2 =93	R3 =96	R4 =83	R5 =85	R6 =89	R7 =88	
R8 =72	R9 =25	R10=83	R11=83	R12=60	R13=88	R14=99	R15=80

WHITE:ANSI_5000K

Photometric & Radiometric Parameters

Flux = 2030.7 lm Eff. : 99.95 lm/W Fe = 6.4313 W

Electrical parameters

V = 120.11 V I = 0.1799 A P = 20.32 W PF = 0.9401 F=60.07 Hz

FOR DETAILED TEST REPORT, PLEASE REFER TO QTR DHK-TT69-20W

GREAVES INC
DHK Group

Laguna Hills, California 92653
Email: DHKDefense@DHKI.com,
Tel: (310) 728-6171

www.GreavesINC.com
www.DHKI.com

ALFA1 TRI-PROOF Explosion Proof LED Light System, MIL-EPRL

ALFA1 Products Designed with Ai

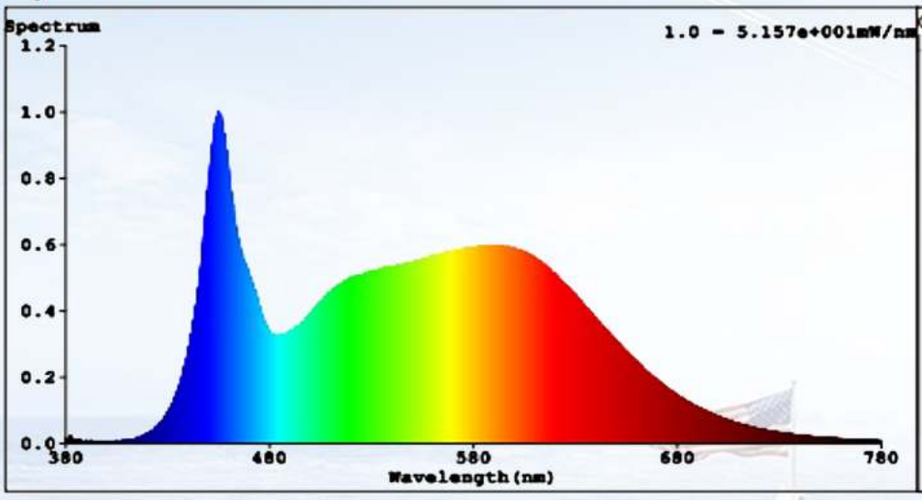
SPECTRUM TEST

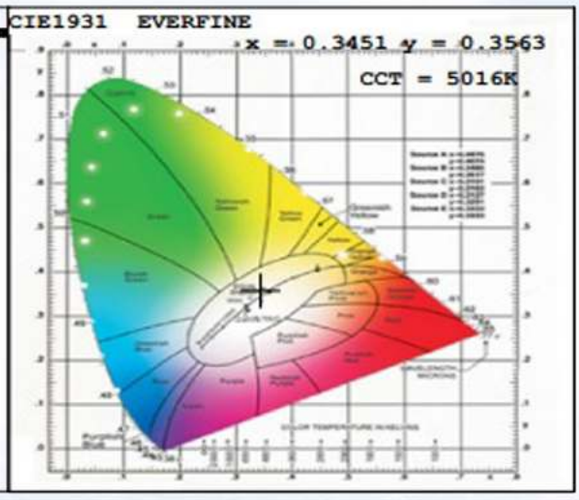
Sample	:	Date	: 2022-09-19
Specification	: **DHK-TT69-20W**	Standardtus	:
Sample No.	: **100-2X**	Instrument	: HaasSuite(EVERFINE)
Manufacturer	:	Test by	: Jarvis
Remark	:		

Test Condition

Temprature	: 25.4Deg	RH	: 54.3%
WL Range	: 380nm-780nm	IP	: 47961 (73%)
Test Mode	: Fast Test	T	: 71 ms
Sensitivity	: High		

Spectrum





Colorimetric Parameters

Chromaticity Coordinate: x = 0.3451 y = 0.3563 / u' = 0.2096 v' = 0.4869 (duv=2.35e-03)

CCT= 5016K Prcp WL: Ld=570.2nm Purity=10.5%

Peak WL: Lp=455nm FWHM: =24.7nm Ratio:R=16.3% G=78.4% B=5.3%

Render Index: Ra = 87.0

R1 =86	R2 =94	R3 =96	R4 =85	R5 =86	R6 =90	R7 =87	
R8 =71	R9 =25	R10=85	R11=85	R12=67	R13=89	R14=98	R15=81

WHITE:ANSI_5000K

Photometric & Radiometric Parameters

Flux = 1970.8 lm Eff. : 98.97 lm/W Fe = 6.2838 W

Electrical parameters

V = 120.09 V I = 0.1769 A P = 19.91 W PF = 0.9372 F=60.07 Hz

FOR DETAILED TEST REPORT, PLEASE REFER TO QTR DHK-TT69-20W

GREAVES INC
DHK Group

Laguna Hills, California 92653
Email: DHKDefense@DHKI.com,
Tel: (310) 728-6171

www.GreavesINC.com
www.DHKI.com

ALFA1 TRI-PROOF Explosion Proof LED Light System, MIL-EPRL

ALFA1 Products Designed with Ai

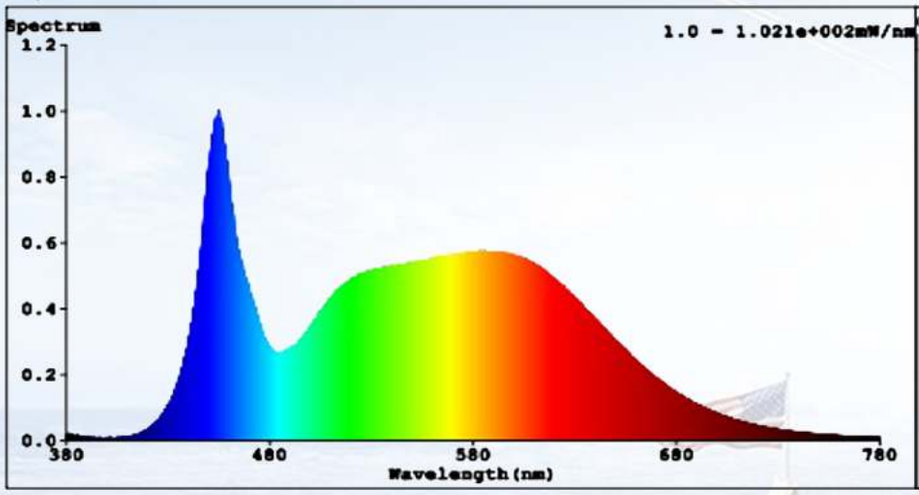
SPECTRUM TEST

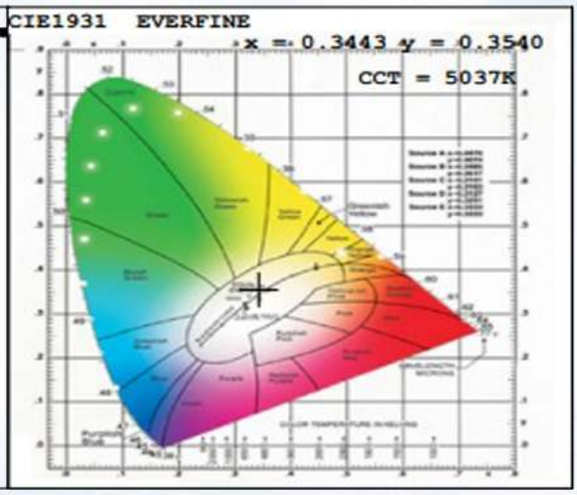
Sample	:	Date	: 2022-09-19
Specification	: **DHK-TT69-40W**	Standardtus	:
Sample No.	: **100-1X**	Instrument	: HaasSuite(EVERFINE)
Manufacturer	:	Test by	: Jarvis
Remark	:		

Test Condition

Temprature	: 25.4Deg	RH	: 54.3%
WL Range	: 380nm-780nm	IP	: 46091 (70%)
Test Mode	: Fast Test	T	: 38 ms
Sensitivity	: High		

Spectrum





Colorimetric Parameters

Chromaticity Coordinate: x = 0.3443 y = 0.3540 / u' = 0.2099 v' = 0.4857 (duv=1.53e-03)

CCT= 5037K Prcp WL: Ld=570.6nm Purity=9.5%

Peak WL: Lp=455nm FWHM: =22.7nm Ratio:R=16.2% G=78.9% B=4.9%

Render Index: Ra = 86.4

R1 =86	R2 =92	R3 =95	R4 =85	R5 =86	R6 =88	R7 =88	
R8 =72	R9 =25	R10=79	R11=85	R12=64	R13=88	R14=97	R15=81

WHITE:ANSI_5000K

Photometric & Radiometric Parameters

Flux = 3777.8 lm Eff. : 104.32 lm/W Fe = 12.056 W

Electrical parameters

V = 120.07 V I = 0.3081 A P = 36.21 W PF = 0.9791 F=60.07 Hz

FOR DETAILED TEST REPORT, PLEASE REFER TO QTR DHK-TT69-40W

GREAVES INC
DHK Group

Laguna Hills, California 92653
Email: DHKDefense@DHKI.com,
Tel: (310) 728-6171

www.GreavesINC.com
www.DHKI.com

ALFA1 TRI-PROOF Explosion Proof LED Light System, MIL-EPRL

ALFA1 Products Designed with Ai

PROUDLY ASSEMBLED IN USA

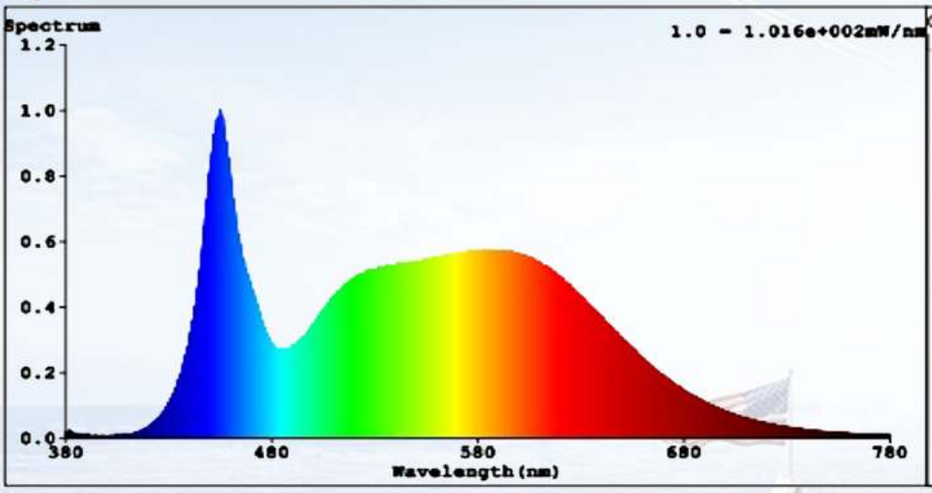
SPECTRUM TEST

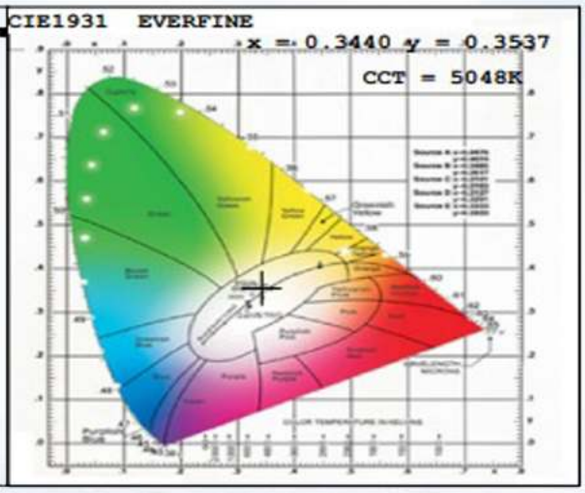
Sample	:	Date	: 2022-09-19
Specification	: **DHK-TT69-40W**	Standardtus	:
Sample No.	: **100-2X**	Instrument	: HaasSuite(EVERFINE)
Manufacturer	:	Test by	: Jarvis
Remark	:		

Test Condition

Temprature	: 25.4Deg	RH	: 54.3%
WL Range	: 380nm-780nm	IP	: 45879 (70%)
Test Mode	: Fast Test	T	: 38 ms
Sensitivity	: High		

Spectrum





Colorimetric Parameters

Chromaticity Coordinate: x = 0.3440 y = 0.3537 / u' = 0.2099 v' = 0.4855 (duv=1.46e-03)

CCT= 5048K Prcp WL: Ld=570.5nm Purity=9.4%

Peak WL: Lp=455nm FWHM: =23.1nm Ratio:R=16.2% G=78.8% B=5.0%

Render Index: Ra = 86.5

R1 =86	R2 =92	R3 =95	R4 =85	R5 =86	R6 =88	R7 =88	
R8 =72	R9 =26	R10=80	R11=84	R12=64	R13=88	R14=97	R15=82

WHITE:ANSI_5000K

Photometric & Radiometric Parameters

Flux = 3761.0 lm Eff. : 103.97 lm/W Fe = 12.018 W

Electrical parameters

V = 120.07 V I = 0.3077 A P = 36.18 W PF = 0.9791 F=60.07 Hz

FOR DETAILED TEST REPORT, PLEASE REFER TO QTR DHK-TT69-40W

GREAVES INC
DHK Group

Laguna Hills, California 92653
Email: DHKDefense@DHKI.com,
Tel: (310) 728-6171

www.GreavesINC.com
www.DHKI.com