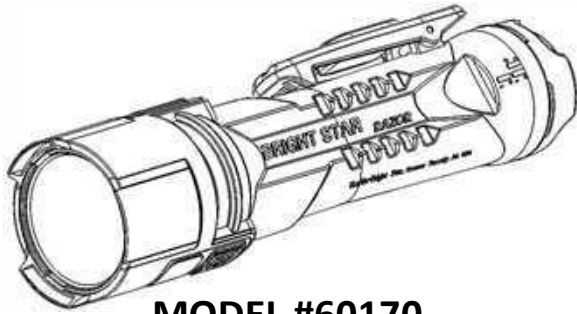


RAZOR FSL



MODEL #60170

Intrinsically Safe / À SÉCURITÉ INTRINSÈQUE

SAFETY APPROVALS

Class I, II, III Division 1 Group A-G T2

Class I, II, III Division 2 Groups A-D, F, G T2

SGS21ATEX0124

IECEX BAS 21.0042

BAS21UKEX0609

II 1 G Ex ia op is IIC T2 Ga

IP 64

Ta = -20° C to + 40° C

4.5 Volts (Battery Powered)

Ta = -20° C to + 40° C



Warning Notice:

- To reduce the risk of ignition of a flammable or explosive atmosphere, batteries must be changed only in a location known to be non-hazardous.
- To reduce the risk of explosion do not mix old batteries with used batteries, or mix batteries from different manufactures
- Dust layers must be prevented from building up on equipment
- The equipment must not be left energized and unattended in Zone20 areas
- Do not open when an explosive atmosphere is present / Ne pas ouvrir en présence d'une atmosphère explosive
- Substitution of components may impair intrinsic safety / La substitution des composants peut nuire à la sécurité intrinsèque
- Replace batteries only with the following models:
KBS Power Solutions, AA, Models KA2500 or KA2600
Rayovac High Energy LR6
Energizer, AA, Alkaline model E91

This product has been designed for high performance, rough use and pairs best with a set of KBS Power Solutions KA2600 MaxX Alkaline batteries.

LED Function

1st Main LED Button Press – High Mode

2nd Main LED Button Press – Low Mode

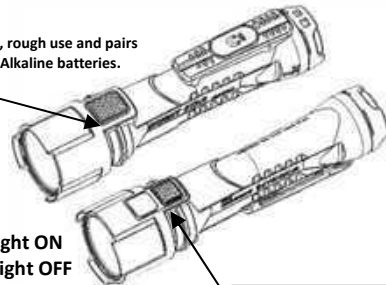
3rd Main LED Button Press – OFF

1st Downlight LED Button Press – Downlight ON

2nd Downlight LED Button Press – Downlight OFF

Downlight LED Button Press when Main LED On – Combo Mode

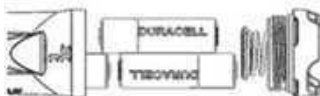
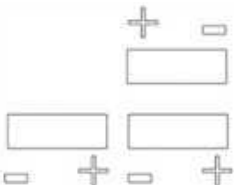
Main LED Button



Downlight LED Button

Battery Replacement

- 1.) Ensure battery replacement is taking place in a non-hazardous location.
- 2.) Unscrew bottom cap to remove batteries. Place new, approved batteries in Razor as shown below. Markings also found on Razor.



KBS
INNOVATIONS

Rev D 4/23



EU - TYPE EXAMINATION CERTIFICATE

Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

EU - Type Examination Certificate Number: **SGS21ATEX0124X – Issue 1**

Product: **RAZOR 60160/RAZOR FSL 60170 Flashlights**

Manufacturer: **Koehler-Bright Star**

Address: **380 Stewart Road, Hanover Twp, PA 18706, United States of America**

This re-issued certificate extends EU Type Examination Certificate No. **SGS21ATEX0124** to apply to product designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

SGS Fimko Oy, Notified Body number 0598, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report No. **See Certificate History**

Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018 EN 60079-11:2012 EN 60079-28:2015

except in respect of those requirements listed at item 18 of the Schedule.

If the sign “X” is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

This EU - TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

The marking of the product shall include the following :

 **II 1 G Ex ia op is IIC T2 Ga**

SGS Fimko Oy Customer Reference No. **7128**

Project File No. **23/0250**

This document is issued by the Company subject to their General Conditions for Certification Services accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained herein reflects the Company's findings at the time of their intervention only and within the limits of Client's instructions, if any. It does not necessarily indicate that the equipment may be used in particular industries or circumstances. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, schedule included, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

SGS Fimko Oy

Takomotie 8
FI-00380 Helsinki, Finland
Telephone +358 (0)9 696 361
e-mail sgs.fimko@sgs.com
web site www.sgs.fi

Business ID 0978538-5 Member of the SGS Group (SGA SA)

Mikko Välimäki
Authorised Signatory for SGS Fimko Oy



13

Schedule

14

Certificate Number SGS21ATEX0124X – Issue 1

15 Description of Product

RAZOR 60160 and RAZOR FSL 60170 Flashlights are powered by 3 x 1.5V AA cells in series. The permitted Alkaline cell types that may be used are marked on the body of the flashlight: Duracell (MN1500) LR6; Energizer Alkaline LR06; Rayovac AA LR06; KA2500 cells manufactured by KBS Prime Power Solutions and KA2600 cells manufactured by KBS Prime Power Solutions. All cells used within the product must be of the same cell type/manufacturer.

RAZOR 60160 operates with one spotlight and the RAZOR FSL 60170 has a side light and a spotlight. The unit is cylindrical in shape with approximately 18cm in length and 4.5cm round. The irradiated area of the light source or the lens is effectively around 1000mm².

16 Report Number

See Certificate History.

17 Specific Conditions of Use

1. Replace batteries in an atmosphere known to be non-hazardous.
2. Do not open equipment in a hazardous area.
3. Do not mix old batteries with new batteries or mix batteries from different manufactures.
4. Replace batteries only with the following battery models/types. KBS Power Solutions, AA, Models KA2500 or KA2600; Duracell, AA, Alkaline model MN1500; Rayovac High Energy LR6 or Energizer, AA, Alkaline model E91.

18 Essential Health and Safety Requirements

In addition to the Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9, the following are considered relevant to this product, and conformity is demonstrated in the report:

Clause	Subject
1.2.7	LVD type requirements
1.2.8	Overloading of equipment (protection relays, etc.)
1.4.1	External effects
1.4.2	Aggressive substances, etc.

19 Drawings and Documents

New drawings submitted for this issue of certificate:

Number	Sheet	Issue	Date	Description
10B-2239	1 to 2	C	04/11/23	RAZOR
10B-2240	1 to 2	C	04/11/23	RAZOR FSL



Current drawings which remain unaffected by this issue:

Number	Sheet	Issue	Date	Description
3B-2241	1 of 3	--	10/20/2020	SWITCH/CONTROL BOARD ASSEMBLY MODEL 60160
3B-2241	2 of 3	--	10/20/2020	MAIN LED PCB ASSEMBLY MODEL 60160
3B-2241	3 of 3	--	10/20/2020	SCHEMATIC MODEL 60160
3B-2242	1 of 4	--	10/20/2020	SWITCH/CONTROL BOARD ASSEMBLY MODEL 60170
3B-2242	2 of 4	--	10/20/2020	MAIN LED PCB ASSEMBLY MODEL 60170
3B-2242	3 of 4	--	10/20/2020	DOWNLIGHT PCB ASSEMBLY MODEL 60170
3B-2242	4 of 4	--	10/20/2020	SCHEMATIC MODEL 60170

These drawings are common to, and held with, IECEx BAS 21.0042X and BAS21UKEX0609X.

20 Certificate History

Certificate No.	Date	Comments
SGS21ATEX0124	03 August 2021	The release of the prime certificate. The associated test and assessment against the requirements of EN IEC 60079-0:2018, EN 60079-11:2012 and EN 60079-28:2015 is documented in IECEx Test Report No. GB/BAS/ExTR21.0134/00 and held with Project No. 21/0512.
SGS21ATEX0124X Issue 1	15 June 2023	This issue of the certificate permits the introduction of two alternative cell types considered suitable to be used with the equipment. The new cells are KA2500 cells manufactured by KBS Prime Power Solutions and KA2600 cells manufactured by KBS Prime Power Solutions. Additionally, the variation introduces new specific conditions of use and a reduced detail (short form) certification label to replace the originally certified long form version. The associated test and assessment is recorded in IECEx ExTR GB/SGS/ExTR23.0039/00 and held with project 23/0250.

For drawings applicable to each issue, see original of that issue.

CERTIFICATION COMPLIANCE

Certificate [REDACTED] 21/SUW/00014X

Contract Number: [REDACTED]
Certificate Number: [REDACTED] CERT210300034

Certified Professional flashlight

Trademarks

Model(s): ██████████ 60, 60170

Technical D (3 AA Cells);

ss I, II, III Division 1 Groups A (0°C to 40°C) IP 64;
ss I, II, III Division 2 Groups A (0°C to 40°C) IP 64;

Certificate Holder: [REDACTED] Dealer-Bright Star, LLC
[REDACTED] Stewart Road, 18706, Hanover, Pennsylvania, United States of America

This certificate supersedes previous certificates issued with the same certificate number. Certification is valid when indicated on the SGS directory of certified products - www.sgs.com - if using the QR code below. The product is certified according to ISO/IEC Guide 65 of product certification, System 3, and in accordance with:

UL 913, 8th [REDACTED] Rev. Dec. 6, 2019

UL 60079-0 [REDACTED] April 15, 2020

UL 60079-1 September 14, 2018

UL 60079-2 [REDACTED] March 6, 2020

CAN/CSA C-100 Rev. February 2014

CAN/CSA C100 Rev. February 2014

CAN/CSA C1000-10 Edition, 2016

Certificati

This product is not a Duracell, AA, Alkaline model MN1300 or Energizer Energy LR6; Energizer,

AA, Alkaline Power Solutions Models: 2500 &

To reduce the risk of igniting a flammable or explosive atmosphere, [REDACTED] changed only in a

location known to [REDACTED]

Authorized _____ Effective _____ April 2023

Vijay Ranganathan

Vijayaraghavan
Certifier

SGS SGS SGS

Page 1 of 1

This certificate is issued by the company under its General Conditions for Certification Services accessible at <https://www.sgs.com/en/terms-and-conditions>. Attention is drawn to the limitations of liability defined therein and in the Test Report here above mentioned which findings are reflected in this Certificate. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Certification Body

Connectivity & Products, a division of SGS North America Inc.
620 Old Peachtree Road, Ste. 100, Suwanee, GA 30024, USA
t +1 770 570 1800 f +1 770 277 1240 www.sgs.com





IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx BAS 21.0042X	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 1	Issue 0 (2021-08-05)
Date of Issue:	2023-06-15		
Applicant:	Koehler-Bright Star 380 Stewart Road Hanover Twp PA 18706 United States of America		
Equipment:	RAZOR 60160/RAZOR FSL 60170 Flashlights		
Optional accessory:			
Type of Protection:	Intrinsic Safety, Inherently Safe Optical Radiation		
Marking:	Ex ia op is IIC T2 Ga		

Approved for issue on behalf of the IECEx
Certification Body:

Mr R S Sinclair

Position:

Technical Manager

Signature:
(for printed version)

pp D Brearley

Date:
(for printed version)

15/06/2023

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

SGS UK Limited
Rockhead Business Park
Staden Lane
Buxton, Derbyshire SK17 9RZ
United Kingdom





IECEx Certificate of Conformity

Certificate No.: **IECEx BAS 21.0042X**

Page 2 of 4

Date of issue: 2023-06-15

Issue No: 1

Manufacturer: **Koehler-Bright Star**
380 Stewart Road
Hanover Twp
PA
18706
United States of America

Manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

[IEC 60079-0:2017](#) Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

[IEC 60079-11:2011](#) Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

[IEC 60079-28:2015](#) Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation
Edition:2

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

[GB/BAS/ExTR21.0134/00](#)

[GB/SGS/ExTR23.0039/00](#)

Quality Assessment Report:

[US/FMG/QAR08.0001/14](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx BAS 21.0042X**

Page 3 of 4

Date of issue: 2023-06-15

Issue No: 1

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

RAZOR 60160 and RAZOR FSL 60170 Flashlights are powered by 3 x 1.5V AA cells in series. The permitted Alkaline cell types that may be used are marked on the body of the flashlight: Duracell (MN1500) LR6; Energizer Alkaline LR06; Rayovac AA LR06; KA2500 cells manufactured by KBS Prime Power Solutions and KA2600 cells manufactured by KBS Prime Power Solutions. All cells used within the product must be of the same cell type/manufacturer.

RAZOR 60160 operates with one spotlight and the RAZOR FSL 60170 has a side light and a spotlight. The unit is cylindrical in shape with approximately 18cm in length and 4.5cm round. The irradiated area of the light source or the lens is effectively around 1000mm².

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Replace batteries in an atmosphere known to be non-hazardous.
2. Do not open equipment in a hazardous area.
3. Do not mix old batteries with new batteries or mix batteries from different manufactures.
4. Replace batteries only with the following battery models/types. KBS Power Solutions, AA, Models KA2500 or KA2600; Duracell, AA, Alkaline model MN1500; Rayovac High Energy LR6 or Energizer, AA, Alkaline model E91.



IECEx Certificate of Conformity

Certificate No.: **IECEx BAS 21.0042X**

Page 4 of 4

Date of issue: 2023-06-15

Issue No: 1

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

Variation 1.1

This issue of the certificate permits the introduction of two alternative cell types considered suitable to be used with the equipment.

Variation 1.2

This issue of the certificate permits the use of a marking label with reduced information for clarity.

Variation 1.3

This issue of the certificate addresses and corrects/clarifies a typographical error in the original IECEx ExTR. No impact to the assessment is observed by this variation.

Variation 1.4

Introduction of new Conditions of Use which consequently introduces an "X" Suffix to the certificate.

ExTR: **GB/SGS/ExTR23.0039/00**

File Reference: **23/0250**