

Royal Canadian Mounted Police Gendarmerie royale du Canada Doc. No: PD-PE-88 Date: 2022/11/07

Annex B Purchase Description Flashlight, General Duty and Accessories

This document has 8 pages including the drawings.

This document was created in English.

The document is available in English and French.

⊠ English/Anglais

□ Français/French

Issued on the authority of the Commissioner, Royal Canadian Mounted Police.

Modifications		
Date	Para. No.	Description
2021-09-15		New Purchase Description
2022-11-07		Revised Purchase Description

1 Document Scope

- 1.1 This purchase description governs the manufacture and inspection of the Flashlight, General Duty and Accessories. The specific items covered under this purchase description are as follows with stock numbers (to be applied upon issuance of Standing Offer):
 - i. Flashlight, General Duty (stock no. XXXXXX)
 - ii. Holster, Flashlight (stock no. XXXXXX)
 - iii. Batteries, Flashlight, Disposable (stock no. XXXXX)
 - iv. Batteries, Flashlight, Rechargeable (stock no. XXXXXX)
 - v. Battery Charger, Flashlight (stock no. XXXXXX)
- 1.2 This purchase description supersedes all previous purchase descriptions for the RCMP Flashlight, General Duty and Accessories.

2 Applicable Documents

2.1 The following publications are applicable to this purchase description.

2.2 American National Standards Institute

ANSI/ PLATO FL 1 – 2019 Flashlight Basic Standard Performance

3 Definitions

In specifying requirements, distinct terms are used. They are defined as follows:

- 3.1.1 **Mandatory Requirements** A criterion that must be met to be in accordance with the technical requirement. The words "must" and "mandatory" indicate a mandatory requirement.
- 3.1.2 **Preferred Criterion** A criterion with significant operational value. The words "should" or "preferred" indicate a preference. A preferred criterion is not mandatory.
- 3.1.3 **Optional Criterion** A criterion that is permissive or discretionary. The word "may" indicates an option. An optional criterion is not mandatory.

4 Terminology

- 4.1 For the purposes of this Purchase Description, the following definitions apply:
- 4.1.1 Belt Attachment A mechanism used to attach the flashlight holster to the duty belt,
- 4.1.2 **Flashlight Holster** A piece of equipment used to secure a flashlight to a duty belt for carriage.

- 4.1.3 **Holster Tube** The cylindrical portion of the flashlight holster where the flashlight is stored.
- 4.1.4 **Swivel Mechanism** A mechanism that allows the holster tube to rotate relative to the belt loop.

5 Requirements

5.1 Intended Use

The flashlight and other items included in this specification are intended for use by General Duty and Plainclothes law enforcement officers. The flashlight is worn on the duty belt.

5.2 General

- 5.2.1 **Workmanship** The items covered by this purchase description must be free from material and manufacturing defects that may affect their safety, appearance, functionality, or serviceability.
- 5.2.2 **Durability** The flashlight must withstand the rigours of training and operational police duties, which may include but are not limited to: falls and drops, and repeated movement.
- 5.2.3 Environmental Requirements The flashlight must operate in indoor and outdoor environments. Flashlights will be exposed to varied environmental conditions across Canada. Flashlights are worn on the duty belt and may be exposed to elements of rain, snow, and UV. The flashlight must remain operational after extended exposure to cold weather.
- 5.2.4 **Interoperability** The flashlight must be compatible with all accessories provided (items ii through v in para. 1.1 of this specification).
- 5.2.5 **Labelling** The flashlight packaging must be labelled with ANSI/PLATO ratings icons. The flashlight packaging and all packaging for the accessories must be labelled with the manufacturer's number, stock number, and standing offer number. Packaging and labelling must be available in English and French.

Flashlight

- 5.3 **Operational Requirements**
- 5.3.1 Lighting
 - a) Beam Distance The minimum beam distance must be 15 m.
 - b) **Light Output** Minimum 700 lumens with a minimum run time of 1.5 hours when tested in accordance with ANSI/PLATO FL-1 2019.

- c) Power Source The flashlight must be compatible with both rechargeable and nonrechargeable battery options. Battery options, and applicable charging accessories, must be included. Batteries must be rated for high drain devices; lithium or lithium ion batteries are required. Flashlights with proprietary power sources must also be capable of operating with commercially available generic batteries.
- 5.3.2 **Equipment Integration** The flashlight must allow for single handed operation in order to be compatible with pistol shooting techniques. Flashlights with clips along the side of the body are acceptable. If the flashlight has a clip, it must be compatible with the supplied holster and must not interfere with use of the grip ring.
- 5.3.3 **Waterproof** The flashlight must have a minimum water proof rating of IPX7 (submersion at 1 meter for 30 minutes).
- 5.3.4 **Impact Resistance** The flashlight must have a minimum impact resistance rating from a 1 m drop height.

5.4 Design

- 5.4.1 **Colour** The Flashlight, General Duty must be black in colour. The finish must be non-reflective.
- 5.4.2 **Dimensions** The bezel diameter must be between 1"-1.575" and the total length must be between 4.5"-6".
- 5.4.3 **Weight** The Flashlight, General Duty, including batteries, must not exceed 6.0 oz.
- 5.4.4 **Switch and Settings** The power switch (on/off) must be raised and on the tail end of the flashlight. Additional switches or buttons do not meet the requirement. The flashlight must have a single lighting mode. Programmable flashlights do not meet the requirement. Adjustable brightness and strobe functions do not meet the requirement.
- 5.4.5 **Grip Ring** The flashlight must have a grip ring encircling the outer circumference of the flashlight body. The grip ring must be either fixed or moveable. If the grip ring is moveable, it must not move unintentionally during use of the flashlight and when the flashlight is drawn or holstered. The raised surface of the grip ring must not exceed 0.5 cm in height when measured from the body of the flashlight. The grip ring must have a non-slip surface.
- 5.4.6 **Grip Surface** The surface of the flashlight body must provide grip with gloved or ungloved hands in wet conditions. The grip surface must be permanent. In wet conditions the grip surface must not become slippery. Grip surfaces with knurling are of significant operational value and are preferred.
- 5.4.7 **Lens** The flashlight lens must be recessed to prevent scratching. The lens must be antishatter and abrasion resistant.
- 5.4.8 **Wrist Strap** Flashlights with wrist straps are not acceptable and do not meet this requirement. If the flashlight is manufactured with a wrist strap as a default, the wrist strap must be removed prior to delivery to the RCMP.

5.4.9 Materials

- 5.4.9.1 **Corrosion-resistance** All metals must be corrosion-resistant to moisture and humidity. Where coatings are used on high impact or high abrasion areas, underlying materials must be corrosion-resistant.
- 5.4.9.2 **Bulb** The bulb must be a white LED; additional colour filters must not be provided.

Holster

5.5 **Operational Requirements**

The holster must be designed to prevent the power switch from depressing and turning on the flashlight while stored. Flashlights which activate when worn on the duty belt do not meet the requirement.

- 5.5.1 **Holster Tube** The flashlight holster tube must be a molded one-piece construction or a multi-piece construction tube. All holster pieces must be permanently bonded and the seams must be fully sealed. The bottom of the holster tube must have a hole for drainage.
- 5.5.2 **Retention Mechanism** The holster must hold the flashlight securely. The holster tube must have a friction fit retention mechanism to prevent the flashlight from falling out of the holster while walking, running, jumping, or performing typical law enforcement duties. The retention mechanism must allow for instantaneous draw. Holsters with straps or other mechanisms which result in a multi-step draw do not meet the requirement.
- 5.5.3 **Swivel Mechanism** If the holster has a swivel mechanism, the rotation must be permanently limited to 180 degrees or less. Holsters that allow for more that 180 degrees of rotation do not meet the requirement. At minimum, the swivel mechanism must lock in place in the vertical position, 45 degrees left and right of the vertical position and 90 degree left and right of the vertical position. The swivel mechanism must have sufficient strength to remain locked in position at the chosen angle when the user is walking, running, jumping, or performing typical law enforcement duties.
- 5.5.4 **Belt Attachment** The holster must attach to the duty belt with a closed loop slide attachment or a clamping device that will secure the holster to the duty belt and prevent it from sliding on the belt. Open ended clips which rely on a friction fit to secure the holster to the belt do not meet the requirement. The belt attachment must be compatible with a standard 5.0-5.7 cm wide duty belt and must accommodate belt thicknesses from 3-5 mm. The belt attachment mechanism should be compatible with MOLLE style belts.

5.5.5 **Colour**

The holster must be black in colour, with no reflective components.

5.5.6 **Dimensions**

The maximum width across the flashlight holster must not exceed 5.5 cm at any point. The maximum depth from the front to the back of the flashlight holster must not exceed 7 cm at any point.

5.5.7 Materials

The holster must be constructed from a durable rigid polymer material. Holsters constructed from textiles or other soft materials do not meet the requirement.

Table I Testing Requirements				
Requirement	Minimum Performance	Method		
Beam Distance	15 meter			
Light Output	700 lumens			
Run time	1 hour 30 minute	ANSI/ PLATO FL 1-2019		
Waterproof	IPX7			
Impact Resistance	1 meter			