

QUALITATIVE REQUIREMENT & TRAIL DIRECTIVES FOR “TACTICAL LIGHT(DUAL MODE - VISIBLE & IR)

The purpose of this Trial Directive is to establish minimum performance requirements and test methods for an equipment generally used for surveillance purpose. Tactical Light (Dual Mode – Visible & IR) can be used as a surveillance equipment for operational as well as administrative duties. It is multipurpose equipment as it contains both LED and IR facilities. Such type of equipment with high resolution capability is very essential for NSG in the present scenario. Draft QRs/ TDs to ensure performance while procuring the “Tactical Light (Dual Mode – Visible & IR)” are as given below:-

S No	Specifications	Qualitative Requirement	Trial Directives
1	General	Before commencement of trial, vendor shall be briefed about the test procedures.	Trial of the equipment shall be conducted in front of Technical Evaluation Committee and physical evaluation of the equipment would be carried out during TECT.
2	Body Material	Material of equipment should be of corrosion free high quality light weight stainless steel/ type III anodized aluminium.	To be physically checked by the bd of offr during TECT stage and an undertaking certificate be obtained from OEM. In case of any doubt, the veracity of the same be checked from concerned lab.
3	Weight	Should not exceed 500gm including all its accessories to carry the same easily.	To be physically checked by the bd of offr during TECT stage.
4	Length	Length must be between 150 cm to 175 cm which is compatible for CQB wpns and for other trg activities.	To be physically checked by the bd of offr during TECT stage. During the physical checking, the equipment should be attached with CQB weapons to check its compatibility.
5	Radius	Light of torch should be capable to cover the area upto 200 mtrs for surveillance purpose and provision to expand the light to cover the area should be provided.	Check the equipment from 200 mtrs distance during night and brightness while on expanding the light should also be assessed by targeting in a particular object.
6	Flash Light	Flash light should be LED to ensure the clear visibility and durability.	To be physically checked by the bd of offr during TECT stage.
7	Battery storage capacity	Once the bty charged fully, at least 60 min bright light should be provided without any interruption.	To be physically checked by the bd of offr during TECT stage. Use it continuously for one hour to check its ability to provide brightness for one hour at least.

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8	Type of bty	Provision for use of both rechargeable and non-rechargeable btys should be provided	To be physically checked by the bd of offr during TECT stage.
9	Picatinny Rail	A standard picatinny rail/ suitable adaptor be provided to mount the equipment on the weapon as specified by the user. A locking mechanism should be provided with quick attachment and detachment with weapon.	Facility should be checked by the Bd of offr during technical evaluation by attaching the equipment with CQB weapons. Attachment and detachment process of Picatinny Rail should be carried out during TECT stage.
10	Battery charger	There should be provision of keeping the battery safe from over charging. The charger should be able to fully charge battery/ cell within two to three hrs.	An accredited certificate be obtained from the firm and it should be checked by the bd of offr.
11	Intensity	Modes like high, low and strobe enables the user to adjust the intensity of light as per requirement.	To be physically checked by the bd of offr during TECT stage.
12	Water resistant	Equipment should be water resistant to facilitate its usage during all weather conditions.	Dip it in water for 5 minutes and check after opening it to see water entry inside and its functioning.
13	IR visibility	Should be provided with both bright light and IR facility in order to use the same for surveillance and operational purpose.	Check the equipment in low light as well as dark conditions upto 100 mtrs and above.
14	Ruggedness	Equipment should be rugged in nature to prevent it from damage.	Throw it from 05 to 10mtrs to hard surface, it should not get damaged.
15	Wavelength	Wave length should be between 850nm to 940nm for prompt invisible covert lights.	Bd of offr should check it physically dring TECT stage.
16	Tailcap	Separate tailcap facility should be provided for attaching with CQB wpns for faster control of flash light/ IR while mounting on weapon.	To be physically checked by the bd of offr during TECT stage.

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17	Colour	Colour of the equipment should be black.	To be physically checked by the bd of offr during TECT stage.
18	Temperature	Equipment should work in both low and high temperature	Can be kept in cold storage to minimum possible temperature and then operate to see if it works. Similar test can be done for high temperature condition as provided.

Miscellaneous points

- (a) **Demonstration and Training.** Demonstration of One set of complete system with its full accessories to be given to NSG personnel on no cost no commitment basis.
- (b) **Warranty.** Comprehensive warranty for one year.