


LIGHTING & POWER EQUIPMENT (CSSR)

79. INFLATABLE LIGHTING TOWER

Qualitative Requirements	Picture of Equipment
<p>This shall be capable to provide instant light as a first responder in shortest possible time to illuminate wide area of approx. 10,000 sq. meters. It shall be light in weight, foldable and portable to be carried in light motor vehicle. It shall be easy to operate by an individual and safe as well as reliable. It shall be supplied with matching generator. It shall not take more than 60 sec to inflate and 03 minutes to achieve its best operating level.</p> <p>Technical Data</p> <p>1) Dimension (folded) : Not more than 580 x 440 x 520mm</p> <p>2) Weight (including generator) : Not more than 50 kg.]</p> <p>3) Total Height : 3 to 5 meters</p> <p>4) Light Sources : 400W metal halide or any suitable source to illuminate 10,000 Sqr meter areas</p> <p>5) Brightness : Not less than 4000 Lumen.</p> <p>6) Time for Max light efficiency : Not more than 3 Min.</p> <p>7) Generator : 4 stroke engine (petrol) Capacity-1200 VA (rated) Fuel consumption-Not more than 1liter/hr Tank capacity- Not less Than 7 liters.</p> <p>8) Storage box suitably designed to accommodate the tower and other spares and easy handling. Proper locking arrangement.</p> <p>9) Rain protection cover for generating set and control gear box made of water proof cloth with air vent arrangement.</p> <p>10) General cover made of water proof cloth to ensure safe storage outside.</p> <p>11) Wind support suitable stay wire ropes (preferably 3 Nos) which can be tied to tower (balloon) and grouting hooks in case of extra wind velocity).</p> <p>12) Tool kit necessary tool required for operation of emergency lighting system.</p> <p>13) Trolley wooden/suitable material trolley with wheels to move the erect tower within a reasonable distance.</p>	

TECHNICAL SPECIFICATION OF LIGHTING TOWER (MOBILE LIGHTING TOWER)

S/No	Specification	Requirement
1.	Dimension	
	i) Height (Closed)	Max Height 1.2 Mtr
	ii)Length x Width (Closed)	up to 550 x 550mm
	iii)Height (extendable)	Min 4.0 Mtr.
	iv)Maximum weight of lighting system (Without packing box, power source and accessories	upto 50 Kg.
	v)Maximum weight of packing box (Injection molded plastic or aluminum case with customized body) and accessories	upto 15 Kg.
	vi)Wheel	Yes/Lightening System with 02 wheels & 04 wheels (both are eligible)
	vii)Adjustable tripod legs	Yes
	viii)Light Angle	Focus of light should be able to provide light of all LED from 180 degree to 360 Degree
2.	LED Luminaries Details	
	i)LED Luminaire	Min 360 watt
	ii)Total luminous flux	Min 36,000 Lumens
	iii)Luminous efficiency (Lm/W)	Min 100 Lm/Watt
	iv)LED IP protection	IP65
	v)CCT (Correlated color temp)	Between 4000K - 6000K
	vi)Operating temp	-15 C to 50 C
	vii)BIS Compliance	BIS 10322 part-5 sec-5 (for LED Luminaire)
	viii)Warranty	2Yr
	ix)Light Dimmer	Yes, light brightness control by dimmer
3.	Power Supply	
	i)Power Supply	AC, & DC
	ii)AC Supply voltage	140 V to 270 V
	iii)DC Supply voltage	Upto 72 Volts
	iv)Backup Hours (At full load)	Min 2.5 Hrs
4.	Driver	
	i)Input supply voltage (AC)	140 V to 270 V
	ii)Output voltage	Upto 72 Volt
	iii)IP Protection	IP65
5.	Battery	

S/No	Specification	Requirement
	i)Battery for operating	01
	ii)Spare Battery	01
	iii)Battery type	Lithium Ion
	iv)Battery Voltage	up to 72 V
	v)Battery capacity	Min 40 AH
	vi)Battery operating temp	-15 C to 50 C
	vii)Battery charging life cycle	Min 500 cycle
	viii)Battery Management System (BMS) circuit to include	i) Uniform charging and discharging (IEC 62133) ii) Digital Overload Protection (IEC 62133) iii) Short Circuit protection (IEC 62133) iv)BIS Rating (IS 16046: Part 2: 2018/IEC 62133-2:2017) v)Battery backup power Level Indicator vi) Battery weight -up to 15 kg
6.	Charger	
	i)Charger supplied	01 No
	ii)Charging time	10 Hrs
	iii)Supply Voltage Range	140 V to 270 V
	iv)Output Voltage Range	up to 72 V
	v)Charging Status Indicator	Yes
7	Other Specification	
	i)Wind resistance	up to 45 Km/Hr
	ii)Extension type	Manual with Pneumatic type
	iii)Packing box type	Injection molded plastic or ABS Plastic or Aluminum case with customized body