7.1.4

7.1.4.1 Annual lighting power requirement met through LED bulbs (in kwh)							
7.1.4.2 Annual lighting power required (in kwh)							
Total Tube Lights = 770 * 40 watts * 4 hours * 365 days = 44968000 wh = **44968** kwh							
Total CFL = 350 * 18 watts *4 hours * 365 days = 9198000 wh = **9198** kwh							
Total LED = 216	95 LED	* 40 watts	* 4 hours	* 365 days	5548000 wh	5548 kwh	
	31 LED	* 50 watts	* 4 hours	* 365 days	2263000 wh	2263 kwh	
	65 LED	* 30 watts	* 4 hours	* 365 days	2847000 wh	2847 kwh	
	25 LED	* 18 watts	* 4 hours	* 365 days	657000 wh	657 kwh	
				Total		**11315 kwh**	
Total Annual Lighting Power = 44968 + 9198 + 11315 = **65481** kwh							
Total Annual lighting power requirement met through LED & CFL bulbs = 11315 + 9198 = **20513** kwh							
Annual lighting power requirement met through LED bulbs / Annual lighting power required *100							
11315/65481 * 100 = 17.28 %							

	DEPARTMENT	No.of Tube Lights	No. of C.F.L	No. of LED	
	EEE	75	-	21	
	MECH	82	34	-	
	ECE	77	64	19	
	CIVIL	74	46	-	
	CSE	42	58	25	
	MBA	31	16	-	
	Bio Tech	68	-	-	
	Ist Year Block	46	32	74	
	Library	34	16	1	
	Ist Year Lab & Admin	28	22	-	
	L.H.	92	-	3	
	B.H.	94	-	3	
	Indoor	9	-	23	
	Auditorium	8	62	-	
	Street	2	-	22	
	Canteen	8	-	25	
	TOTAL Lamps	**770**	**350**	**216**	

7.1.4 Energy Conservation

- Use of LED lamps for street lighting.
- All buildings have been designed to maximize the natural lighting and minimize artificial lighting.
- UPS system for computers have been installed in every department.
- Replacement of halogen lamps in the roads of the campus with LED lamps powered by solar energy is being done in a phased manner.
- All the department laboratories, seminar halls and class rooms have been installed LED or CFL lighting system and also use the college Auditorium.
- The 15 % to 35% of lighting power is conserved from usage of LED and CFL lighting.

LED light for EEE Department

LED light in EEE Department Laboratory

LED light for Street Light