

**APPENDIX E: ENERGY/ COST COMPARATOR PER 100 LAMPS**

**Energy Ratings and Costs for Conventional (Sodium), CPO (Halide/ Cosmopolis), LED (Light Emitting Diode) for a sample of 100 Lamps**

Lamp Type	Like -for Like Replacement (Sodium)					CPO (Cosmopolis) Replacement					LED Replacement				Comments
	Energy (kWh)	Cost (£)	Lamp Cost (£) -4 years	Lantern Cost (£)	Design Life	Energy (kWh)	Cost (£)	Lamp Cost (£) - 4 years	Lantern Cost (£)	Design Life	Energy (kWh)	Cost (£)	Lantern Cost (£)	Design Life	
250 High Pressure Sodium	125,607	14,319	3,600	13,700	20	65,516	7,469	4,800	24,900	20	50,076	5,709	80,000	20	
150 High Pressure Sodium	75,114	8,563	3,400	13,100	20	65,516	7,469	4,800	24,900	20	36,305	4,139	80,000	20	
100 High Pressure Sodium	47,572	5,423	3,100	10,200	20	41,313	4,710	6,400	24,800	20	10,015	1,142	80,000	20	
135 Low Pressure Sodium	74,279	8,468	3,700	13,100	20	65,516	7,469	4,800	24,900	20	50,076	5,709	80,000	20	
90 Low Pressure Sodium	50,911	5,804	3,300	10,200	20	41,313	4,710	6,400	24,800	20	36,305	4,139	80,000	20	
55 Low Pressure Sodium	30,880	3,520	3,000	10,000	20	28,376	3,235	6,200	22,900	20	10,015	1,142	17,000	20	

Lamp & Lantern Cost over 20 years (A)		
£ 31,700	£ 48,900	£ 80,000
£ 30,100	£ 48,900	£ 80,000
£ 25,700	£ 56,800	£ 80,000
£ 31,600	£ 48,900	£ 80,000
£ 26,700	£ 56,800	£ 80,000
£ 25,000	£ 53,900	£ 17,000

20 Year Energy Costs (B)		
£286,380	£149,377	£114,173
£171,260	£149,377	£82,776
£108,460	£94,193	£22,835
£169,360	£149,377	£114,173
£116,080	£94,193	£82,776
£70,400	£64,698	£22,840

Whole life costs over 20 years (A+B)	
£ 318,080	£ 198,277
£ 201,360	£ 198,277
£ 134,160	£ 150,993
£ 200,960	£ 198,277
£ 142,780	£ 150,993
£ 95,400	£ 118,598