

APPENDIX 1

Energy consumption for typical minor road lighting is shown below:

Lighting unit type	Annual energy usage KWh	% energy saving compared to SOX all night operation
SOX Normal Operation	58W x 4154hrs = 240kWh	0%
SOX part night operation (off midnight – 6.00am)	58W x 2328hrs = 135kWh	44%
LED Normal operation (with standard dimming from 8pm with further reduction at 11.00pm until 6.00am)	26W x 783hrs = 20.3kWh 20W x 1093hrs = 21.8kWh 14W x 2278 = 31.8kWh Total = 73.9kWh	69%
LED part night operation (dimming and off midnight – 6.00am)	26W x 783hrs = 20.3kWh 20W x 1093hrs = 21.8kWh 14W x 365hrs = 5.1kWh Total = 47.2kWh	80%
LED reduced output operation (dimming and 20% midnight – 6.00am)	26W x 783hrs = 20.3kWh 20W x 1093hrs = 21.8kWh 14W x 365hrs = 5.1kWh 6W x 1913hrs = 11kWh Total = 58.2kWh	76%