

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% |