



Proposed Turbine Location Site Boundary 10km Radii Local Authority Boundary

Intensity of Turbine Light shown in Candelas (cd)

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|---|----------------------------|----------------|
| Vertical angle | Turbine Lighting Intensity | |
| | 2000cd scenario | 200cd scenario |
| Above 6° | <100cd | <10cd |
| 2° to 6° | 775 to 100cd | 77.5 to 10cd |
| 0° to 2° | 2100 to 775cd | 210 to 77.5cd |
| 0° to -1 | 2100 to 750cd | 210 to 75cd |
| -1° to -2° | 750 to 75cd | 75 to 7.5cd |
| -2° to -3° | 75 to 32cd | 7.5 to 3.2cd |
| -3° to -4° | 32 to 13cd | 3.2 to 1.3cd |
| Below -4° | <13cd | <1.3cd |

1. The lighting intensity for each of the vertical angles shown is based on information provided by an aviation warning light manufacturer (See appendix

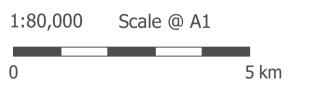
2.Reduced intensity turbine lighting (200cd) based on 'Air Navigation Order 2016 (CAP393) Article 223 (8)' which allows the 2000cd turbine light to be 'reduced to not less than 10% of the minimum peak intensity specified 'i.e. 200cd 'if visibility in all directions from every wind turbine generator in a group is more than 5km '. 3. Perception of theoretical candela intensity does not take account of distance . 4.ZTV calculations do not take into account surface features such as forestry or

5.ZTV calculations for turbine lighting intensity are based on visible aviation

lighting mounted on the turbine nacelle.

6. The ZTV calculates the degree of vertical angle from the study are a shown to each of the Proposed Development turbines.

7.ZTV calculations represent a worst case situation where predicted lighting intensity may be as a result of only one turbine in the layout.





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> Lighting Intensity Figure 6.16

Cloud Hill Wind Farm LVIA Report