



Key

Intensity of Turbine Light shown in Candelas (cd)

Vertical Angle	Turbine Lighting Intensity	
	2000cd light	200cd light
+3° to 0°	2000cd to 1500cd	200cd to 150cd
0° to -1°	2000cd to 750cd	200cd to 75cd
-1° to -2°	800cd to 265cd	80cd to 27cd
-2° to -3°	265cd to 200cd	27cd to 20cd
-3° to -4°	200cd to 175cd	20cd to 18cd
Below -4°	175cd to 75cd	18cd to 8cd

Notes:

1. 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'.
2. The lighting intensity for each of the vertical angles shown is based on information provided by an aviation warning light bulb manufacturer.
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 buildings.
5. ZTV calculations for turbine lighting intensity based on visible aviation lighting mounted on the turbine hub.
6. The ZTV calculates the degree of vertical angle from the study area 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.

Client



Clashindarroch II Wind Farm
Supplementary Information

**SI 2021 Figure 7.12c(ii)
Turbine Lighting Intensity**

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