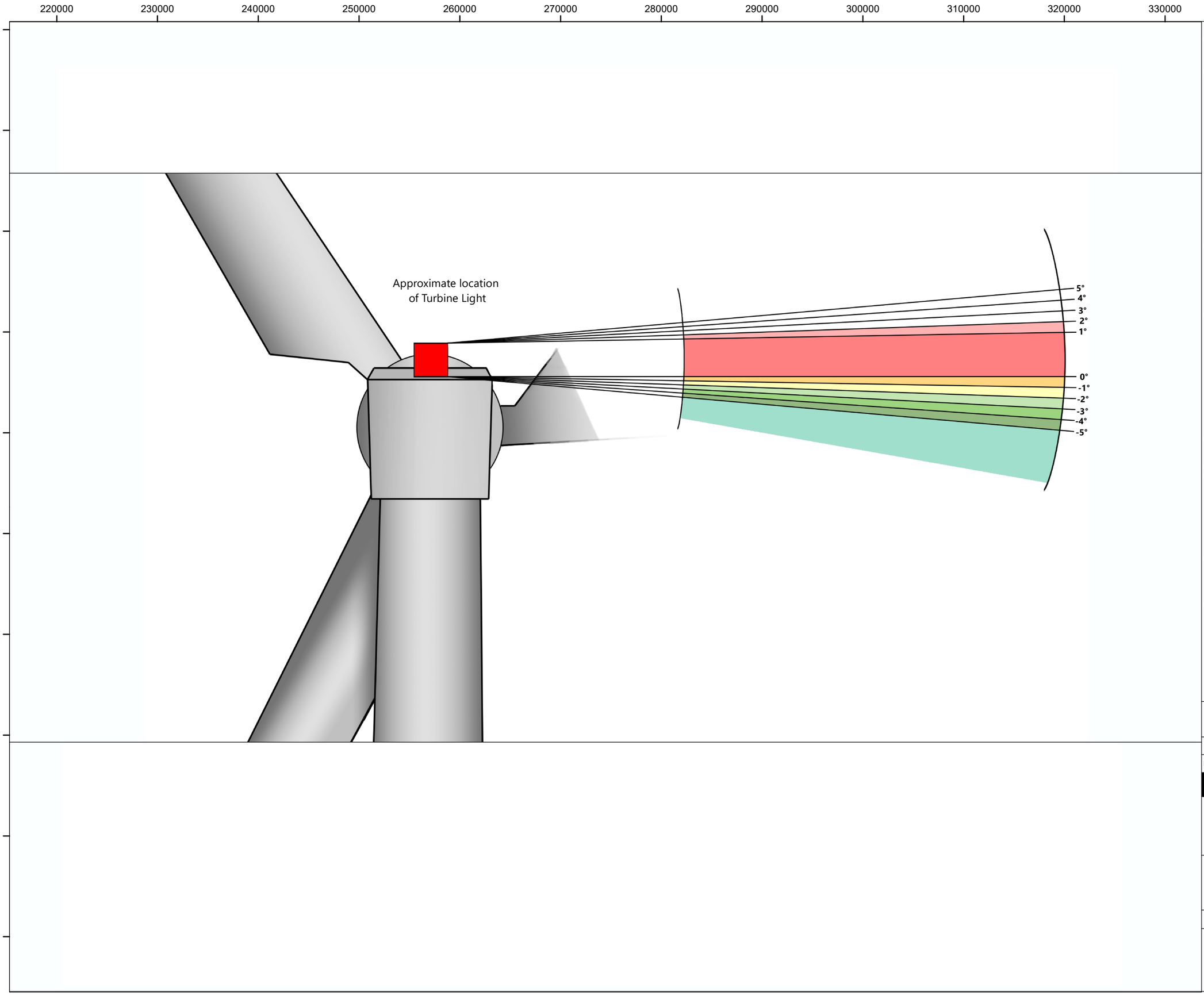

Legend:

Intensity of Turbine Light shown in Candelas (cd)

Vertical Angle	Turbine Lighting Intensity	
	2000cd light	200cd light
+3° to 0°	2000cd	200cd
0° to -1°	2000cd to 750cd	200cd to 75cd
-1° to -2°	750cd to 80cd	75cd to 8cd
-2° to -3°	80cd to 40cd	8cd to 4cd
-3° to -4°	40cd to 10cd	4cd to 1cd
Below -4°	<10cd	<1cd

Source: LuxSolar CAP 168 MIOL-C - https://www.luxsolar.com/Uploads/Docs/luxsolar-datasheet-miol-c-cap168-aircraft-warning-light-l864-lxs-cap168_164.pdf

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 peakintensity 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.

8. No landform within the study area is above 2 degree from the height of the turbine lighting.

Rev	Date	Description	Drn	Chk	App
03	03/04/2025	Final Draft	CW	LB	LB

Lynemore Wind Farm

RSK GALILEO EMPOWER

TITLE:

Figure 5.4.4:
Turbine Lighting Intensity

ID:P663510_TAG000_Layout_A3_L

0 7 14
Kilometres
SCALE1:350,000 @ A3

N W E S

REV 03