



Key

- Site Boundary
- Lit Turbine
- Unlit Turbine
- 20 km Study Area
- 5 km Distance Radii
- Wild Land Area (WLA)

Theoretical Visibility of Lighting Intensity

Vertical Angle	2000 candela (visibility is <5km)	200 candela (visibility is >5km)
1° to 3°	2280 to 2030	228 to 203
0° to 1°	2270	227
0° to -1°	1770	177
-1° to -2°	750	75
-2° to -3°	90	9
Below -3°	Below 45	Below 4.5

Notes

1. ZTV is based on cardinal lighting of 6 turbines with visible aviation lighting mounted on the hub (119m).
2. ZTV calculations returned no results for landform greater than 3° from the turbine hubs.
3. Theoretical lighting intensity shown may be the result of one turbine.
4. ZTV is based on turbine lighting intensity of 2000 candela. Current CAA guidance allows for the light intensity to be reduced 200 candela if visibility is greater than 5 km.
5. Theoretical lighting intensity does not take into account reductions based on distance.
6. Intensity values are for the highest value of average intensity in each given elevation band.

Scale 1:150,000@ A3



**FIR Figure 5
Cardinal Aviation Lighting Strategy:
Theoretical Intensity ZTV**

**Strathy South Wind Farm
FIR 2021**