

ZG LIGHTING - SMP, Huyton (Public Realm External Lighting)

External Lighting Query Responses

Question	Response & Supporting Detail
i. Please explain the 338 lux maximum on the shared pedestrian/cycle walkway and justify why such a high level is required.	The 338 lx figure is a localised peak, not the design level for the area. The zone average is 31.6 lx and uniformity is 0.33, which exceeds the >0.25 pedestrian target used for this scheme. • High brightness directly beneath/in front of luminaires is normal in any externally lit space. • Calculated max/min values reflect calculation-point position relative to the nearest luminaire. • Uniformity achieved (0.33) confirms the design meets industry guidance despite the peak. • A commissioned lighting management system can reduce this on site if required.
ii. Please explain the 146 lux maximum in the main pedestrian area and whether this could be reduced.	Same principle applies. Zone average is 27.0 lx with uniformity of 0.30, exceeding the 0.25 pedestrian target. The peak can be reduced on site via lighting control, not by redesign. • Some luminaires are already dimmed within the calculation model. • Reduction of the peak is a commissioning/control matter, not a layout issue. • A correctly commissioned lighting management system provides this flexibility post-installation.
iii. Please explain the 112 lux maximum in the cenotaph area and whether this is intended as feature lighting.	Yes. This is intended decorative feature lighting of the memorial, trees and benches, layered on top of general path lighting. • In-ground uplights dedicated to the memorial (walk-over, decorative). • Ground-mounted uplights to feature trees. • Under-bench decorative lighting. • Zone uniformity of 0.41 comfortably exceeds the 0.25 pedestrian target.
iv. Several pedestrian areas show high maximum values but relatively low minimum values. Has the scheme been optimised to reduce hotspots and improve uniformity?	Yes, to the level appropriate at this design stage. Every calculated pedestrian zone exceeds 0.25 uniformity and every vehicle zone exceeds 0.40, balanced against wider constraints. • Design balances uniformity with environmental, ecological, technical and commercial considerations. • Localised high/low points within an otherwise-compliant uniformity are expected for point-source external lighting. • Final on-site fine-tuning of brightness distribution sits with the lighting management system at commissioning.
v. Have glare and visual comfort been assessed in areas where illuminance exceeds 100 lux?	Not at this stage, and not calculable yet. Glare and visual comfort depend on surface colours, reflectances, furniture and obstructions that are not yet finalised for the site. • Glare/visual comfort is a human response to brightness contrast within the field of view. • Required surface and obstruction data is not yet available to model this in DIALux. • Calculated illuminance results should be read as a guide to the on-site outcome, not a glare assessment.