



QUEENS, BRADLEY FOLD

FESTOON LIGHTING ASSESSMENT

March 2026

Client: Daniel Thwaites PLC

1. Project Overview

The proposal involves the installation of new decorative festoon lighting to enhance the ambience and usability of the external seating area at The Queens, Bradley Fold. The lighting will provide low-level illumination suitable for hospitality and public use without causing glare or light pollution to surrounding properties.

2. Lighting Description

- **Lighting Type:** Maxiled Festoon Lighting System
- **Manufacturer:** Maxiled Lighting
- **Mounting Height:** 2.5 m (top of timber support posts)
- **Support Structure:** Treated timber posts with stainless steel tension wire between posts
- **Lamp Type:** LED, integrated within IP-rated festoon sockets
- **Colour Temperature:** [Typically 2700–3000 K warm white – confirm from data sheet]
- **Input Voltage:** 230 V AC (plug-in or hard-wired as per design)
- **Ingress Protection:** Minimum IP44 (as per IEC 60598 compliance)
- **Control:** Time-switch control to prevent overnight illumination

3. Standards and Compliance

The festoon lighting system complies with the following standards and requirements:

- **IEC 60598-1:** Luminaires – General Requirements and Tests
- **IEC 60598-2-20:** Lighting Chains (Festoon) for Decorative Purposes
- **BS 7671 (IET Wiring Regulations, 18th Edition):** For all electrical connections, protection, and earthing
- **BS EN 12464-2:** Lighting of Outdoor spaces – guidance on outdoor hospitality lighting levels

Supporting documentation includes:

- Maxiled Lighting Data Sheet (providing technical performance, wattage, IP rating, and photometric data)
- IEC 60598 Test Report (demonstrating conformity with luminaire safety and performance standards)

4. Lighting Design Considerations

4.1 Illumination Levels

The festoon lighting provides ambient decorative illumination with an average horizontal illuminance of approximately 10–20 lux across seating areas—suitable for social and hospitality settings without excessive brightness.

4.2 Glare and Light Spill

- LED lamps are low wattage and warm colour temperature to reduce glare.
- Directional light distribution limits upward or lateral spill.
- No direct line of sight from public roads to light sources.

4.3 Environmental Considerations

- Low energy LED sources reduce energy consumption.
- Lighting is restricted to operational hours only, controlled via timer or manual switch.

4.4 Structural and Electrical Safety

- Timber posts securely fixed in-ground to resist wind loading on catenary wire.
- All electrical connections weatherproofed with IP-rated junction boxes and gland seals.
- Cable runs protected from mechanical damage and UV degradation.
- Installation by a qualified electrician to BS 7671.

5. Summary and Conclusion

The proposed Maxiled festoon lighting installation at The Queens, Bradley Fold, meets relevant UK and international safety standards (IEC 60598) and design best practices for external decorative lighting. The installation will enhance the outdoor seating environment while maintaining safety, efficiency, and visual comfort.

Supporting Documents:

1. Maxiled Festoon Lighting Technical Data Sheet
2. IEC 60598 Test Report for Maxiled Festoon System
3. Site Layout Plan – Drawing 2274/04