# Green Star Short Report Round [1/2]

Ensure all prompts shown in Blue text have been responded to.

Green Star – Office Design v3

Credit: Emi-7 Light Pollution

Project Name: [name]

Project Number: GS- [####]

Points available: 1 Points claimed: [1]

*NB: this Short Report template has been written in accordance with Emi-7 Correction 7, Emi-7 Doc (Design) A*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Emi-7** | **Light Pollution** | Correction | 1 | The following credit criteria is acceptable as an alternative to the credit criteria described in the technical manual:   One point is awarded where: - No external luminaire has an upward light output ratio that exceeds 5%; - The lighting design complies with AS4282 ‘Control of the Obtrusive Effects of Outdoor Lighting’.  Definition of 'Upward light output ratio' as per AS1158.0:2005:  The ratio of the luminous flux emitted by a luminaire above the horizontal to that emitted by the lamp. |
| **Emi-7** | **Light Pollution** | Documentation (Design) | A | The below documentation guideline can only be used in conjunction with Emi-7 Technical Clarification No. 1  Based on feedback from the assessors and project teams, the following documentation is no longer required at the time of a Green Star - Design submission for this credit: \*Extracts from the specification(s).  Furthermore, the following documentation is being modified to now read: \* Short report from the lighting engineer describing how the Credit Criteria have been met by:  - Detailing the external and atrium lighting on the site, the areas illuminated, calculations and illumination diagrams (including horizontal and vertical light distribution), and referencing the photometric data included in the luminaire schedule to demonstrate that no light spill is impacting the night sky or neighbouring properties in accordance with AS4282 1997. \* Luminaire Schedule for all external lighting (and lighting within glazed atria where applicable), nominating the type, lighting distribution and quantity of each luminaire and including the relevant photometric data showing that the luminaires do not have an upward light output ratio that exceeds 5%.  All other documentation must be provided as per the technical manual at the time of submission. |

1. External Lighting Description

[Please introduce the assessors to the external lighting on site. This section should briefly summarise the external areas which are lit and the lighting approach adopted]

2. Atrium Lighting Description

[Please nominate whether or not the project includes an atrium. If an atrium is present, please summarise the lighting used within this space]

3. External Lighting Upward Light Ratio

As demonstrated in the table below, no external luminaires used within the project have an upward light ratio that exceeds 5%.

**Table 1: Upward light ratio**

|  |  |  |  |
| --- | --- | --- | --- |
| Luminaire | Description | Areas Used | Upward light component |
| E.g. 'A' | E.g. 9W LED | E.g. North fence | E.g. None. These lights are mounted... |
|  |  |  |  |

[Please insert hyperlinks to documents which support these claims]

4. Compliance **with AS4282 ‘Control of Obtrusive Effects of Outdoor Lighting’**

The lighting provided to external areas of the building complies with AS4282 ‘Control of Obtrusive Effects of Outdoor Lighting’.

*NB: compliance with AS4282 ‘Control of Obtrusive Effects of Outdoor Lighting’ must be demonstrated for all buildings which intend to target points for this credit, regardless of their location.*

This project has undertaken modelling of light levels at the site boundary in accordance with AS4282 clause 2.7. The results of this modelling are summarised below:

**Table 2: Maximum light level at boundary in accordance with AS4282 Table 2.1**

|  |  |  |
| --- | --- | --- |
| Boundary | Maximum illuminance in vertical plane | Compliance with AS4282 Table 2.1? |
| E.g. Northern boundary | 15 lux | E.g. yes |
|  |  |  |

**Table 3: Luminous intensity emitted by luminaires**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Luminaire | Description | Areas Used | Luminous intensity | Compliance with AS4282 Table 2.1? |
| E.g. 'A' | E.g. 9W LED | E.g. North fence | E.g. 1,000 cd | E.g. yes |
|  |  |  |  |  |

[Please insert hyperlinks to documents which support these claims]

Therefore, as demonstrated in section 3 and 4, this project is eligible to achieve [1] point for minimising light pollution into the night sky.

## Discussion

[Insert any issues you would like to highlight and clarify to the Assessment Panel.]

Author Details:

[Insert name, position and contact details of author]

[Date]

––– **Report end** –––