light pollution

## CREDIT 27

## INDIVIDUAL BUILDING PORTFOLIO

## PROJECT NAME: [NAME]

## PROJECT NUMBER: GS- [####]

|  |  |  |  |
| --- | --- | --- | --- |
| TOTAL POINTS AVAILABLE: | 2 | POINTS CLAIMED: | [#] |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No.** | **Type** | **Criteria** | **Description** | **Claimed** |
| **27.1** | **Action** | **External Lighting** | **1 point** is available where operational practices limiting the impact of external light pollution due to the external lights are in place and operational during the performance period. | [#] |
| **27.2** | **Action** | **Internal Lighting** | **1 point** is available where operational practices limiting the impact of external light pollution due to the internal lights are in place and operational during the performance period. | [#] |

# Project-specific technical questions

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| --- | --- |
| There are no project-specific technical questions for this credit. |  |
| There are project-specific technical questions for this credit and all responses received from the GBCA are attached. |  |

27.1 external Lighting

|  |  |
| --- | --- |
| The project achieved one (1) point in the previous Certification and **no changes** have been made to the building during the performance period that would have an impact on the implemented operational practices that limit external light pollution due to the external lights.  ***No further information is required for this criterion.*** |  |
| The project achieved one (1) point in the previous Certification and **changes** have been made to the building during the performance period that have had an impact on the implemented operational practices that limit external light pollution due to the external lights.  ***Complete sections 27.1.1 and either 27.1A, 27.1B or 27.1C*** |  |
| One (1) point was not targeted / awarded in the previous Certification.  ***Complete sections 27.1.1 and either 27.1A, 27.1B or 27.1C.*** |  |

### 27.1.1 Pathway Selection

|  |  |
| --- | --- |
| **27.1** The impact of light pollution from external sources has been eliminated as far as possible, and this is demonstrated in accordance with: | |
| Performance Pathway 27.1A |  |
| Prescriptive Pathway 27.1B |  |
| Green Star – Light Pollution 27.1C |  |

### 27.1A Performance Pathway

|  |  |  |
| --- | --- | --- |
| **27.1A.1** AS 4282 has been applied to the design, installation, operation and maintenance of the building’s external lighting. | | [Y/N] |
| **Requirements** | **Supporting Evidence** | |
| **27.1A.2** Describe how the direct illuminance from external lighting in operation during the performance period produces a maximum initial point illuminance value no greater than that noted below:  Reference supporting evidence attached to the submission template demonstrating how each of the requirements has been met. | | |
| Maximum initial point illuminance of 0.5 Lux to the site boundary; and |  | |
| Maximum initial point illuminance of 0.1 Lux to 4.5 metres beyond the site into the night sky, when measured using a calculation plane set at the highest point of the building. |  | |
| Verify that calculations were carried out in accordance with AS 4282 and the requirements of 27.1A.3 |  | |

### 27.1B Prescriptive Pathway

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| --- | --- |
| **27.1B.1** Describe how the impact of light pollution from all internal lighting sources is minimized by one of the arrangements noted below:  Reference supporting evidence attached to the submission demonstrating that the requirements have been met. | |
| a: No lights or light fixtures of any type illuminate the facade of the building, and there is no glazed atria or similar; or |  |
| b: At least 95% of all lights or light fixtures have a ULOR that does not exceed 5%, relative to its actual mounted orientation. |  |
| Describe how the ULOR provided or calculated is relevant to the as-installed orientation of the luminaire. |  |
| **27.1B.2** Demonstrate with current documentation that these requirements have been met during the performance period. |  |

### 27.1C Green Star – Light Pollution Pathway

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| --- | --- | --- |
| **27.1C.1**  The building has been awarded a Green Star As Built Rating, and achieved the point for ‘Light pollution.’ | | [Y/N] |
| **27.1C.2** Demonstrate that no changes have been made to the external light systems since the As Built Certification |  | |

Identify where this information can be found within the supporting documentation provided.

|  |  |
| --- | --- |
| **Supporting Documentation**  (Name / title / description of document) | **Reference**  (Page no. or section) |
| *####* | [####] |
| #### | [####] |

### DISCUSSION

Outline any issues you would like to highlight and clarify with the Certified Assessor(s).

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|  |

27.2 internal Lighting

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| --- | --- |
| The project achieved one (1) point in the previous Certification and **no changes** have been made to the building during the performance period that would have an impact on the implemented internal lighting and light sources, that cause external light pollution impacts.  ***No further information is required for this criterion.*** |  |
| The project achieved one (1) point in the previous Certification and **changes** have been made to the building during the performance period that have had an impact on the implemented internal lighting and light sources, that cause external light pollution impacts.  ***Complete section 27.2.1.*** |  |
| One (1) point was not targeted / awarded in the previous Certification.  ***Complete section 27.2.1.*** |  |

### 27.2.1 Internal lighting light pollution

|  |  |  |
| --- | --- | --- |
| Are all relevant internal lighting and light sources, that cause external light pollution impacts, automatically turned off when the building is not occupied. | | [Y/N] |
| **Requirements** | **Supporting Evidence** | |
| Describe how the internal lighting and light sources are automatically turned off when the building is not occupied. |  | |

Identify where this information can be found within the supporting documentation provided.

|  |  |
| --- | --- |
| **Supporting Documentation**  (Name / title / description of document) | **Reference**  (Page no. or section) |
| *####* | [####] |
| #### | [####] |

### DISCUSSION

Outline any issues you would like to highlight and clarify with the Certified Assessor(s).

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# DECLARATION

I confirm that the information provided in this document is truthful and accurate at the time of completion.

Provide author details, including name, position and email address:

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Click here to enter a date.