

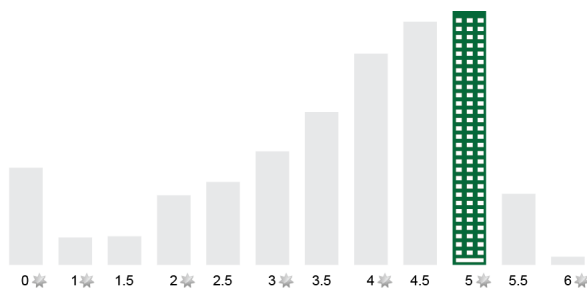
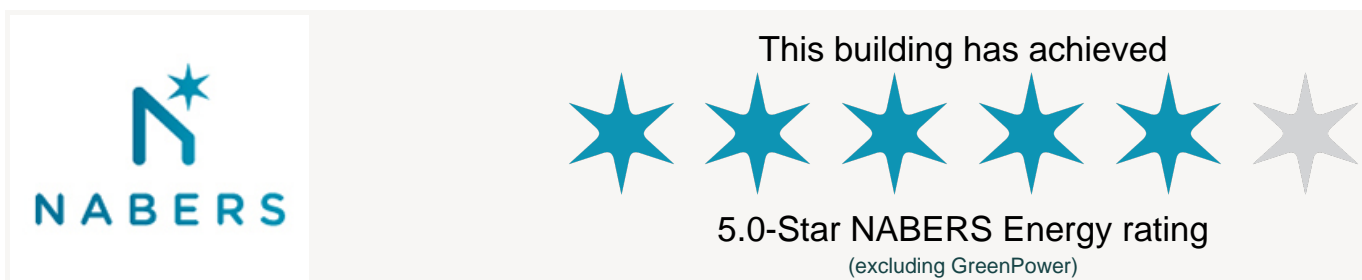


## BUILDING ENERGY EFFICIENCY CERTIFICATE

### BUILDING DETAILS

Building name	The Quadrant	Certificate no.	B0598-2019/11
Owner's name	The Trustee for QUADRANT SUB TRUST	Current from	30 Jan 2019
Building address	1 William Street, Perth, WA, 6000	Current to	29 Jan 2020
Net Lettable Area of the building	23,397.1 m <sup>2</sup>	CBD assessor name	Darren Wills
		CBD assessor no.	CBDA0390

### PART 1 - NABERS ENERGY RATING



**HOW DOES YOUR BUILDING COMPARE?**  
The highlighted building on the adjacent graph compares the NABERS Star rating of your building to other buildings that were issued a BEEC nationally in 2017.

### PART 2 – TENANCY LIGHTING ENERGY EFFICIENCY ASSESSMENT

The average tenancy lighting efficiency in the assessed spaces of your building is 'Good'.

YOUR LIGHTING	NATIONAL AVERAGE
Excellent	Excellent
Good	Good
Median	Median
Poor	Poor
Very Poor	Very Poor

This table shows how your building compares with other buildings that were issued a BEEC nationally in 2017.

These averages are area-weighted. Individual spaces may perform better or worse than the average.

The worst performing space is Quadrant - Level 10 - Whole Floor ('Very Poor'), while the best performing space is Quadrant - Level 3 - Whole Floor ('Excellent'). Details on Page 3.

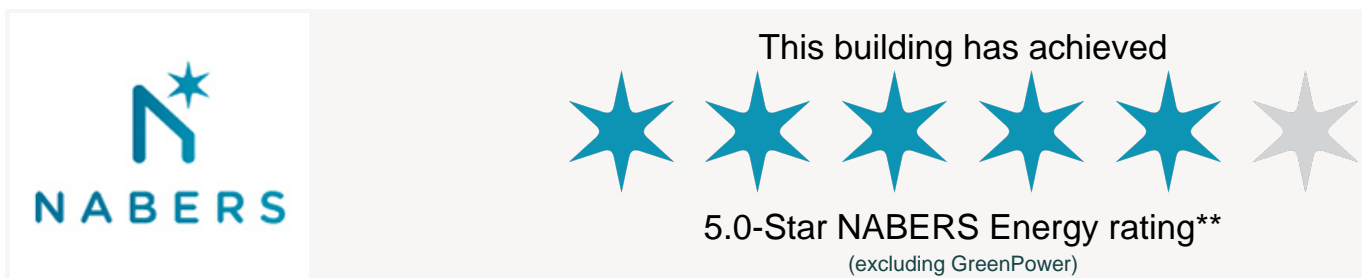


## PART 1 – NABERS\* ENERGY RATING

### BUILDING DETAILS

Building address	1 William Street, PERTH, WA, 6000	NABERS rating no.	N53407
		Certified date	30 Jan 2019
		Current to	29 Jan 2020

### NABERS ENERGY RATING



Rating scope	Base Building
Rated area	13,165.1 m <sup>2</sup>
Rated hours	55.0

### BUILDING CONSUMPTION & EMISSION DETAILS

Annual emissions	690,625 kg CO <sub>2</sub> -e per year
Annual emissions intensity	52.5 kg CO <sub>2</sub> -e/m <sup>2</sup> per year
Annual consumption	3,554,577 MJ per year

### NABERS ASSESSOR DETAILS

Assessor name	Darren Wills
Assessor number	90351

### ABOUT NABERS ENERGY RATINGS

0.....	Very poor
1.....	Poor
2.....	Below average
2.5 to 3....	Average
4.....	Good
5.....	Excellent
6.....	Market leading

\* National Australian Built Environment Rating System is a joint initiative of the Australian, State and Territory governments.

\*\* This rating must be used in all advertising.



## PART 2 – TENANCY LIGHTING

### ENERGY EFFICIENCY ASSESSMENT

#### ASSESSMENT SUMMARY

Building address 1 William Street, Perth, WA, 6000

Assessment scope All Office Space

Assessed NLA 23,030.2 m<sup>2</sup>

Assessor name	Assessor no.	Assessment no.	Version no.	Space ID	Certified date	Current to
Alex Sejournee	CBDA0174	LA5772	V.3	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23	20 Jun 2017	20 Jun 2022

Space ID	Functional space name	NLA (m <sup>2</sup> )	NLPD (W/m <sup>2</sup> )	NLPD Performance comparison	Lighting System Existing/Proposed	Control Capacity	Performance comment
1	Quadrant - Level 5 - Whole Floor	1,096.0	6.9	Excellent	Existing	Good	
2	Quadrant - Level 16 - Whole Floor	1,094.0	4.7	Excellent	Existing	Good	
3	Quadrant - Level 13 - Whole Floor	1,095.0	10.3	Median	Existing	Poor	
4	Quadrant - Part Ground Level - Ground Floor East	90.7	10.3	Median	Existing	Moderate	
5	Quadrant - Part Ground Level - Ground Floor West	488.5	10.3	Median	Existing	Poor	
6	Quadrant - Part Level 1 - Level 1 East	667.4	10.3	Median	Existing	Poor	
7	Quadrant - Part Level 1 - Level 1 West	606.9	10.3	Median	Existing	Poor	
8	Quadrant - Level 9 - Whole Floor	1,094.5	10.3	Median	Existing	Poor	
9	Quadrant - Level 8 - Whole Floor	1,096.5	10.3	Median	Existing	Poor	
10	Quadrant - Level 17 - Whole Floor	1,094.0	6.9	Excellent	Existing	Good	
11	Quadrant - Level 15 - Whole Floor	1,095.0	4.7	Excellent	Existing	Good	
12	Quadrant - Level 14 - Whole Floor	1,095.0	4.7	Excellent	Existing	Good	
13	Quadrant - Level 6 - Whole Floor	1,096.0	4.7	Excellent	Existing	Good	
14	Quadrant - Level 7 - Whole Floor	1,096.0	4.7	Excellent	Existing	Good	
15	Quadrant - Level 3 - Whole Floor	1,497.7	3.5	Excellent	Existing	Good	
16	Quadrant - Level 2 - Whole Floor	1,496.1	3.5	Excellent	Existing	Good	
17	Quadrant - Level 10 - Whole Floor	1,094.5	23.5	Very Poor	Existing	Poor	
18	Quadrant - Level 11 - Whole Floor	1,097.0	10.3	Median	Existing	Poor	
19	Quadrant - Level 12 - Whole Floor	1,095.4	n/a	n/a	Existing	n/a	Not assessable
20	Quadrant - Level 18 - Whole Floor	1,077.0	7.6	Good	Existing	Good	
21	Quadrant - Level 19 - Whole Floor	1,042.0	10.1	Median	Existing	Good	
22	Quadrant - Level 20 - Whole Floor	763.0	10.1	Median	Existing	Good	



Space ID	Functional space name	NLA (m <sup>2</sup> )	NLPD (W/m <sup>2</sup> )	NLPD Performance comparison	Lighting System Existing/Proposed	Control Capacity	Performance comment
23	Quadrant - Level 4 - Whole Floor	1,062.0	5.4	Excellent	Existing	Good	

**Disclaimer:** The Australian/New Zealand Standards 1680 series makes recommendations for the lighting of interiors and workplaces. This assessment makes no judgment about the performance of the installed lighting system against the recommendations of those standards. Prospective tenants or owners should check that the lighting system is fit for their requirements.

# Definitions and other information on how to interpret the lighting assessments are at Attachment A.

# ATTACHMENT A

## ENERGY EFFICIENCY GUIDANCE

Guidance on how building energy efficiency might be improved for building owners and tenants may be found at <http://cbd.gov.au/get-and-use-a-rating/how-to-improve-your-NABERS-rating>.

## DEFINITIONS

Definitions and other information on how to interpret the tenancy lighting energy efficiency assessments are in accordance with the CBD Tenancy Lighting Assessment for Offices Rules, available from the CBD website at [www.cbd.gov.au](http://www.cbd.gov.au).

### Average tenancy lighting efficiency

The average tenancy lighting efficiency, as shown on the front page of the BEEC, is calculated based on an area weighted average of the Nominal Lighting Power Density (NLPD) of all of the functional spaces included on the BEEC. This means that larger functional spaces with a greater floor area will count more towards this calculation than smaller spaces. The calculated area weighted average NLPD for the building is then categorised as per the NLPD performance comparison below. Spaces which are deemed non-assessable are excluded, and where a proposed system has been assessed the proposed system NLPD is used in the calculation. The national average is an area-weighted average of the NLPD of all functional spaces listed on all BEECs issued in 2017. If a space was listed on more than one BEEC issued in 2017, only the most recent instance of that space was included in the calculation.

### Nominal Lighting Power Density (NLPD)

The NLPD is calculated and reported for each assessed functional space. It is based on dividing the total power of the base lighting system in the assessed space by the Net Lettable Area (NLA) of that space.

NLPD performance comparison is divided into the following categories;

Excellent performance is where the NLPD is equal to or less than 7.0 W/m<sup>2</sup>

Good performance is where the NLPD is between 7.1 - 10.0 W/m<sup>2</sup>

Median performance is where the NLPD is between 10.1 - 15.0 W/m<sup>2</sup>

Poor performance is where the NLPD is between 15.1 - 18.0 W/m<sup>2</sup>

Very Poor performance is where the NLPD is greater than or equal to 18.1 W/m<sup>2</sup>

### Existing Lighting System

The existing lighting system, in an owner occupied functional space, refers to the lighting that might reasonably be expected to remain immediately prior to any subsequent lease or sublease. In a leased space, it refers to the lighting that might reasonably be expected to remain at the conclusion of the lease or sublease, disregarding the impact of any make good clause or any negotiations that may occur between the landlord and the tenant. It does not include desk mounted task lighting nor architectural or feature lighting installed by the owner, lessee or sublessee. All other lighting will generally be included. In an unoccupied functional space, it refers to the lighting that exists at the time the assessment is conducted.

### Control capacity

<u>Poor</u>	Most of the lighting within the functional space relies on manual switching to turn the lights on and off where switching zones are greater than 250m <sup>2</sup> .
<u>Moderate</u>	At least 50% by area of the lighting within the functional space is managed by a timer/ supervisory control system that ensures that lights are turned off outside normal working hours.
OR	
	At least 50% by area of the lighting within the functional space is managed by a occupancy control system that ensures that lights only operate when the space is occupied, rooms are individually controlled and a general switching zones are more than 100m <sup>2</sup> .
OR	
	The lighting within the functional space relies on manual switching to turn the lights on and off where the functional space is less than 250m <sup>2</sup> .
<u>Good</u>	At least 50% by area of lighting within the functional space is managed by a occupancy control system that ensures that lights only operate when the space is occupied, rooms are individually controlled and general switching zones are less than 100m <sup>2</sup> .

Fully functioning lighting control systems may reduce the energy consumption of the installed lighting system by reducing the amount of time the lights are on or by reducing the operating power through dimming strategies. This assessment has identified the level of sophistication of the installed lighting controls but has not verified their functionality. Prospective tenants or owners should check the ongoing functionality of the installed lighting control system, its ability to be modified if required and whether it is fit for their requirements.

### Performance comment

The performance comment describes any additional features of the lighting system that may affect its energy or functional performance.

### Proposed lighting system

Proposed lighting refers to the lighting system as it may exist following either an owner/lessor proposed upgrade or resulting from a make good provision in an existing lease/sublease where the relevant work is expected to be completed within three months of the lighting assessment. Prospective buyers, lessees and sublessees should assume that the existing lighting remains in place in the absence of specific assurances from the seller or lessor that the work to install the proposed lighting has in fact been carried out.

### Reason for assessment

Scheduled upgrade - Scheduled upgrade refers to works that, at the time of the assessment, were to be carried out within three months on the lighting system in the relevant functional space by the owner.

Make good - Make good refers to works that, at the time of the assessment, were to be carried out within three months on the lighting system in the relevant functional space by the outgoing lessee or sublessee.

## DISCLAIMER

The Australian and New South Wales governments do not guarantee the accuracy, reliability, or completeness of the materials and assumes no legal liability whatsoever arising from or in connection with the information contained in Part One and Part Two of this certificate. The Australian and NSW governments recommend that users exercise their own skill and care with respect to the use of the information contained in this certificate and that users carefully evaluate the accuracy, reliability, currency, completeness and relevance of the certificate for their purposes, including seeking professional advice, as appropriate.

## ISSUING AUTHORITY

Issued by the Australian Government, under the ***Building Energy Efficiency Disclosure Act 2010*** to disseminate information and encourage energy efficiency in large commercial office building in Australia.