

Project name

**Tottenham Hotspur Football Club Hotel -
CLEAN**

As designed

Date: Tue Oct 24 14:11:44 2023

Administrative information

Building Details

Address: Address 1, London, N17

Certifier details

Name: Name

Telephone number: Phone

Address: Street Address, City, Postcode

Certification tool

Calculation engine: Apache

Calculation engine version: 7.0.22

Interface to calculation engine: IES Virtual Environment

Interface to calculation engine version: 7.0.22

BRUKL compliance module version: v6.1.e.1

Foundation area [m²]: 591.85The CO₂ emission and primary energy rates of the building must not exceed the targets

Target CO ₂ emission rate (TER), kgCO ₂ /m ² annum	7.52
Building CO ₂ emission rate (BER), kgCO ₂ /m ² annum	6.93
Target primary energy rate (TPER), kWh _{PE} /m ² annum	260.95
Building primary energy rate (BPER), kWh _{PE} /m ² annum	247.6
Do the building's emission and primary energy rates exceed the targets?	BER ≤ TER BPER ≤ TPER

The performance of the building fabric and fixed building services should achieve reasonable overall standards of energy efficiency

Fabric element	U _a -Limit	U _a -Calc	U _i -Calc	First surface with maximum value
Walls*	0.26	-	-	UNKNOWN
Floors	0.18	-	-	UNKNOWN
Pitched roofs	0.16	-	-	No pitched roofs in building
Flat roofs	0.18	-	-	No flat roofs in building
Windows** and roof windows	1.6	0.64	0.64	HT000059:Surf[0]
Rooflights***	2.2	-	-	No roof lights in building
Personnel doors^	1.6	-	-	No personnel doors in building
Vehicle access & similar large doors	1.3	-	-	No vehicle access doors in building
High usage entrance doors	3	-	-	No high usage entrance doors in building

U_a-Limit = Limiting area-weighted average U-values [W/(m²K)]U_i-Calc = Calculated maximum individual element U-values [W/(m²K)]U_a-Calc = Calculated area-weighted average U-values [W/(m²K)]

* Automatic U-value check by the tool does not apply to curtain walls whose limiting standard is similar to that for windows.

** Display windows and similar glazing are excluded from the U-value check.

*** Values for rooflights refer to the horizontal position.

^ For fire doors, limiting U-value is 1.8 W/m²K

NB: Neither roof ventilators (inc. smoke vents) nor swimming pool basins are modelled or checked against the limiting standards by the tool.

Air permeability	Limiting standard	This building
m ³ /(h.m ²) at 50 Pa	8	3

Building services

For details on the standard values listed below, system-specific guidance, and additional regulatory requirements, refer to the Approved Documents.

Whole building lighting automatic monitoring & targeting with alarms for out-of-range values	YES
Whole building electric power factor achieved by power factor correction	>0.95

1- Main system + DHW (district heating)

	Heating efficiency	Cooling efficiency	Radiant efficiency	SFP [W/(l/s)]	HR efficiency
This system	1	4.8	0	1.6	0.8
Standard value	N/A	4.5**	N/A	2^	N/A
Automatic monitoring & targeting with alarms for out-of-range values for this HVAC system					YES
** Standard shown is for air-cooled chillers >=400 kW. For chillers <400 kW, limiting SEER is 4.					
^ Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.					

"No HWS in project, or hot water is provided by HVAC system"

1- District heating network

	Emission factor [kgCO ₂ /kWh]	Primary energy factor [kWh _{PE} /kWh]
This building	0.022	1.066
Standard value	0.35	N/A

Zone-level mechanical ventilation, exhaust, and terminal units

ID	System type in the Approved Documents
A	Local supply or extract ventilation units
B	Zonal supply system where the fan is remote from the zone
C	Zonal extract system where the fan is remote from the zone
D	Zonal balanced supply and extract ventilation system
E	Local balanced supply and extract ventilation units
F	Other local ventilation units
G	Fan assisted terminal variable air volume units
H	Fan coil units
I	Kitchen extract with the fan remote from the zone and a grease filter
NB: Limiting SFP may be increased by the amounts specified in the Approved Documents if the installation includes particular components.	

Zone name	SFP [W/(l/s)]										HR efficiency	
ID of system type	A	B	C	D	E	F	G	H	I		Zone	Standard
Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1			
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	-	N/A
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	-	N/A
Hotel_Suite10_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	-	N/A
Hotel_Suite9_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	-	N/A
Hotel_suite8_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	-	N/A
Hotel_Suite7_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	-	N/A
Hotel_Suite6_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	-	N/A
Hotel_Suite5_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	-	N/A
Hotel_suite3_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	-	N/A

Zone name	SFP [W/(l/s)]									HR efficiency	
ID of system type	A	B	C	D	E	F	G	H	I	Zone	Standard
Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1		
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite18_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite17_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite16_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite15_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite14_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite13_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite12_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite4_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite10_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite9_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite8_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite7_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite6_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite5_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite3_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite18_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite17_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite16_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite15_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite14_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite13_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite12_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite4_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite10_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite9_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite8_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite7_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite6_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite5_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite3_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A

Zone name	SFP [W/(l/s)]									HR efficiency	
ID of system type	A	B	C	D	E	F	G	H	I		
Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1	Zone	Standard
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite18_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite17_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite16_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite15_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite14_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite13_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite12_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite4_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite10_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite9_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite8_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite7_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite6_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite5_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite3_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite18_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite17_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite16_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite15_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite14_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite13_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite12_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite4_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite10_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite9_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite8_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite7_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite6_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite5_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite3_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A

Zone name	SFP [W/(l/s)]									HR efficiency	
ID of system type	A	B	C	D	E	F	G	H	I	Zone	Standard
Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1		
Hotel_suite18_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite17_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite16_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite15_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite14_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite13_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite12_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite4_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite10_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite9_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite8_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite7_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite6_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite5_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite3_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite18_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite17_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite16_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite15_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite14_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite13_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite12_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite4_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite10_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite9_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite8_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite7_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite6_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite5_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite3_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite18_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A

Zone name	SFP [W/(l/s)]									HR efficiency	
ID of system type	A	B	C	D	E	F	G	H	I		
Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1	Zone	Standard
Hotel_Suite17_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite16_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite15_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite14_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite13_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite12_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite4_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite10_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite9_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite8_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite7_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite6_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite5_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite3_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite18_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite17_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite16_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite15_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite14_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite13_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite12_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite4_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite11_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite10_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite9_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite8_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite7_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite6_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite5_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite3_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite2_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite1_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_suite18_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A
Hotel_Suite17_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A

Zone name	SFP [W/(l/s)]										HR efficiency	
ID of system type	A	B	C	D	E	F	G	H	I			
Standard value	0.3	1.1	0.5	2.3	2	0.5	0.5	0.4	1	Zone	Standard	
Hotel_suite16_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A	
Hotel_Suite15_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A	
Hotel_suite14_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A	
Hotel_Suite13_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A	
Hotel_suite12_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A	
Hotel_suite4_Ensuite bedroom	-	-	-	-	-	-	-	0.2	-	-	N/A	

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m²]
Standard value		95	80	0.3
Hotel_Core_circulation 7		110	-	-
Hotel_Corridor North		110	-	-
Hotel_Corridor South		110	-	-
Hotel Core_circulation 1		110	-	-
Hotel Core_circulation 2		110	-	-
Hotel Core_Stairwell 2		110	-	-
Hotel Core_Stairwell 1		110	-	-
Hotel Core_Stairwell 4		110	-	-
Hotel Core_Stairwell 3		110	-	-
Hotel Core_circulation 6		110	-	-
Hotel Core_circulation 4		110	-	-
Hotel Core_circulation 5		110	-	-
Hotel Core_circulation 3		110	-	-
Hotel_Suite11_Ensuite bedroom		110	-	-
Hotel_Suite11_Ensuite bedroom		110	-	-
Hotel_Suite10_Ensuite bedroom		110	-	-
Hotel_Suite9_Ensuite bedroom		110	-	-
Hotel_suite8_Ensuite bedroom		110	-	-
Hotel_Suite7_Ensuite bedroom		110	-	-
Hotel_Suite6_Ensuite bedroom		110	-	-
Hotel_Suite5_Ensuite bedroom		110	-	-
Hotel_suite3_Ensuite bedroom		110	-	-
Hotel_suite2_Ensuite bedroom		110	-	-
Hotel_suite2_Ensuite bedroom		110	-	-
Hotel_suite1_Ensuite bedroom		110	-	-
Hotel_suite1_Ensuite bedroom		110	-	-
Hotel_suite18_Ensuite bedroom		110	-	-
Hotel_Suite17_Ensuite bedroom		110	-	-
Hotel_suite16_Ensuite bedroom		110	-	-
Hotel_Suite15_Ensuite bedroom		110	-	-
Hotel_suite14_Ensuite bedroom		110	-	-
Hotel_Suite13_Ensuite bedroom		110	-	-
Hotel_suite12_Ensuite bedroom		110	-	-

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m ²]
	Standard value	95	80	0.3
Hotel_suite4_Ensuite bedroom		110	-	-
Hotel_Core_circulation 7		110	-	-
Hotel_Corridor North		110	-	-
Hotel_Corridor South		110	-	-
Hotel Core_circulation 1		110	-	-
Hotel Core_circulation 2		110	-	-
Hotel Core_Stairwell 2		110	-	-
Hotel Core_Stairwell 1		110	-	-
Hotel Core_Stairwell 4		110	-	-
Hotel Core_Stairwell 3		110	-	-
Hotel Core_circulation 6		110	-	-
Hotel Core_circulation 4		110	-	-
Hotel Core_circulation 5		110	-	-
Hotel Core_circulation 3		110	-	-
Hotel_Suite11_Ensuite bedroom		110	-	-
Hotel_Suite11_Ensuite bedroom		110	-	-
Hotel_Suite10_Ensuite bedroom		110	-	-
Hotel_Suite9_Ensuite bedroom		110	-	-
Hotel_suite8_Ensuite bedroom		110	-	-
Hotel_Suite7_Ensuite bedroom		110	-	-
Hotel_Suite6_Ensuite bedroom		110	-	-
Hotel_Suite5_Ensuite bedroom		110	-	-
Hotel_suite3_Ensuite bedroom		110	-	-
Hotel_suite2_Ensuite bedroom		110	-	-
Hotel_suite2_Ensuite bedroom		110	-	-
Hotel_suite1_Ensuite bedroom		110	-	-
Hotel_suite1_Ensuite bedroom		110	-	-
Hotel_suite18_Ensuite bedroom		110	-	-
Hotel_Suite17_Ensuite bedroom		110	-	-
Hotel_suite16_Ensuite bedroom		110	-	-
Hotel_Suite15_Ensuite bedroom		110	-	-
Hotel_suite14_Ensuite bedroom		110	-	-
Hotel_Suite13_Ensuite bedroom		110	-	-
Hotel_suite12_Ensuite bedroom		110	-	-
Hotel_suite4_Ensuite bedroom		110	-	-
Hotel_Core_circulation 7		110	-	-
Hotel_Corridor North		110	-	-
Hotel_Corridor South		110	-	-
Hotel Core_circulation 1		110	-	-
Hotel Core_circulation 2		110	-	-
Hotel Core_Stairwell 2		110	-	-
Hotel Core_Stairwell 1		110	-	-
Hotel Core_Stairwell 4		110	-	-

General lighting and display lighting		General luminaire		Display light source	
Zone name		Efficacy [lm/W]		Efficacy [lm/W]	Power density [W/m ²]
	Standard value	95		80	0.3
Hotel Core_Stairwell 3		110		-	-
Hotel Core_circulation 6		110		-	-
Hotel Core_circulation 4		110		-	-
Hotel Core_circulation 5		110		-	-
Hotel Core_circulation 3		110		-	-
Hotel_Suite11_Ensuite bedroom		110		-	-
Hotel_Suite11_Ensuite bedroom		110		-	-
Hotel_Suite10_Ensuite bedroom		110		-	-
Hotel_Suite9_Ensuite bedroom		110		-	-
Hotel_suite8_Ensuite bedroom		110		-	-
Hotel_Suite7_Ensuite bedroom		110		-	-
Hotel_Suite6_Ensuite bedroom		110		-	-
Hotel_Suite5_Ensuite bedroom		110		-	-
Hotel_suite3_Ensuite bedroom		110		-	-
Hotel_suite2_Ensuite bedroom		110		-	-
Hotel_suite2_Ensuite bedroom		110		-	-
Hotel_suite1_Ensuite bedroom		110		-	-
Hotel_suite1_Ensuite bedroom		110		-	-
Hotel_suite18_Ensuite bedroom		110		-	-
Hotel_Suite17_Ensuite bedroom		110		-	-
Hotel_suite16_Ensuite bedroom		110		-	-
Hotel_Suite15_Ensuite bedroom		110		-	-
Hotel_suite14_Ensuite bedroom		110		-	-
Hotel_Suite13_Ensuite bedroom		110		-	-
Hotel_suite12_Ensuite bedroom		110		-	-
Hotel_suite4_Ensuite bedroom		110		-	-
Hotel_Core_circulation 7		110		-	-
Hotel_Corridor North		110		-	-
Hotel_Corridor South		110		-	-
Hotel Core_circulation 1		110		-	-
Hotel Core_circulation 2		110		-	-
Hotel Core_Stairwell 2		110		-	-
Hotel Core_Stairwell 1		110		-	-
Hotel Core_Stairwell 4		110		-	-
Hotel Core_Stairwell 3		110		-	-
Hotel Core_circulation 6		110		-	-
Hotel Core_circulation 4		110		-	-
Hotel Core_circulation 5		110		-	-
Hotel Core_circulation 3		110		-	-
Hotel_Suite11_Ensuite bedroom		110		-	-
Hotel_Suite11_Ensuite bedroom		110		-	-
Hotel_Suite10_Ensuite bedroom		110		-	-
Hotel_Suite9_Ensuite bedroom		110		-	-

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m ²]
	Standard value	95	80	0.3
Hotel_suite8_Ensuite bedroom		110	-	-
Hotel_Suite7_Ensuite bedroom		110	-	-
Hotel_Suite6_Ensuite bedroom		110	-	-
Hotel_Suite5_Ensuite bedroom		110	-	-
Hotel_suite3_Ensuite bedroom		110	-	-
Hotel_suite2_Ensuite bedroom		110	-	-
Hotel_suite2_Ensuite bedroom		110	-	-
Hotel_suite1_Ensuite bedroom		110	-	-
Hotel_suite1_Ensuite bedroom		110	-	-
Hotel_suite18_Ensuite bedroom		110	-	-
Hotel_Suite17_Ensuite bedroom		110	-	-
Hotel_suite16_Ensuite bedroom		110	-	-
Hotel_Suite15_Ensuite bedroom		110	-	-
Hotel_suite14_Ensuite bedroom		110	-	-
Hotel_Suite13_Ensuite bedroom		110	-	-
Hotel_suite12_Ensuite bedroom		110	-	-
Hotel_suite4_Ensuite bedroom		110	-	-
Hotel_Core_circulation 7		110	-	-
Hotel_Corridor North		110	-	-
Hotel_Corridor South		110	-	-
Hotel Core_circulation 1		110	-	-
Hotel Core_circulation 2		110	-	-
Hotel Core_Stairwell 2		110	-	-
Hotel Core_Stairwell 1		110	-	-
Hotel Core_Stairwell 4		110	-	-
Hotel Core_Stairwell 3		110	-	-
Hotel Core_circulation 6		110	-	-
Hotel Core_circulation 4		110	-	-
Hotel Core_circulation 5		110	-	-
Hotel Core_circulation 3		110	-	-
Hotel_Suite11_Ensuite bedroom		110	-	-
Hotel_Suite11_Ensuite bedroom		110	-	-
Hotel_Suite10_Ensuite bedroom		110	-	-
Hotel_Suite9_Ensuite bedroom		110	-	-
Hotel_suite8_Ensuite bedroom		110	-	-
Hotel_Suite7_Ensuite bedroom		110	-	-
Hotel_Suite6_Ensuite bedroom		110	-	-
Hotel_Suite5_Ensuite bedroom		110	-	-
Hotel_suite3_Ensuite bedroom		110	-	-
Hotel_suite2_Ensuite bedroom		110	-	-
Hotel_suite2_Ensuite bedroom		110	-	-
Hotel_suite1_Ensuite bedroom		110	-	-
Hotel_suite1_Ensuite bedroom		110	-	-

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m ²]
	Standard value	95	80	0.3
Hotel_suite18_Ensuite bedroom		110	-	-
Hotel_Suite17_Ensuite bedroom		110	-	-
Hotel_suite16_Ensuite bedroom		110	-	-
Hotel_Suite15_Ensuite bedroom		110	-	-
Hotel_suite14_Ensuite bedroom		110	-	-
Hotel_Suite13_Ensuite bedroom		110	-	-
Hotel_suite12_Ensuite bedroom		110	-	-
Hotel_suite4_Ensuite bedroom		110	-	-
Hotel_Core_circulation 7		110	-	-
Hotel_Corridor North		110	-	-
Hotel_Corridor South		110	-	-
Hotel Core_circulation 1		110	-	-
Hotel Core_circulation 2		110	-	-
Hotel Core_Stairwell 2		110	-	-
Hotel Core_Stairwell 1		110	-	-
Hotel Core_Stairwell 4		110	-	-
Hotel Core_Stairwell 3		110	-	-
Hotel Core_circulation 6		110	-	-
Hotel Core_circulation 4		110	-	-
Hotel Core_circulation 5		110	-	-
Hotel Core_circulation 3		110	-	-
Hotel_Suite11_Ensuite bedroom		110	-	-
Hotel_Suite11_Ensuite bedroom		110	-	-
Hotel_Suite10_Ensuite bedroom		110	-	-
Hotel_Suite9_Ensuite bedroom		110	-	-
Hotel_suite8_Ensuite bedroom		110	-	-
Hotel_Suite7_Ensuite bedroom		110	-	-
Hotel_Suite6_Ensuite bedroom		110	-	-
Hotel_Suite5_Ensuite bedroom		110	-	-
Hotel_suite3_Ensuite bedroom		110	-	-
Hotel_suite2_Ensuite bedroom		110	-	-
Hotel_suite2_Ensuite bedroom		110	-	-
Hotel_suite1_Ensuite bedroom		110	-	-
Hotel_suite1_Ensuite bedroom		110	-	-
Hotel_suite18_Ensuite bedroom		110	-	-
Hotel_Suite17_Ensuite bedroom		110	-	-
Hotel_suite16_Ensuite bedroom		110	-	-
Hotel_Suite15_Ensuite bedroom		110	-	-
Hotel_suite14_Ensuite bedroom		110	-	-
Hotel_Suite13_Ensuite bedroom		110	-	-
Hotel_suite12_Ensuite bedroom		110	-	-
Hotel_suite4_Ensuite bedroom		110	-	-
Hotel_Core_circulation 7		110	-	-

General lighting and display lighting		General luminaire		Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m ²]	
Standard value		95	80	0.3	
Hotel_Corridor North		110	-	-	
Hotel_Corridor South		110	-	-	
Hotel Core_circulation 1		110	-	-	
Hotel Core_circulation 2		110	-	-	
Hotel Core_Stairwell 2		110	-	-	
Hotel Core_Stairwell 1		110	-	-	
Hotel Core_Stairwell 4		110	-	-	
Hotel Core_Stairwell 3		110	-	-	
Hotel Core_circulation 6		110	-	-	
Hotel Core_circulation 4		110	-	-	
Hotel Core_circulation 5		110	-	-	
Hotel Core_circulation 3		110	-	-	
Hotel_Suite11_Ensuite bedroom		110	-	-	
Hotel_Suite11_Ensuite bedroom		110	-	-	
Hotel_Suite10_Ensuite bedroom		110	-	-	
Hotel_Suite9_Ensuite bedroom		110	-	-	
Hotel_suite8_Ensuite bedroom		110	-	-	
Hotel_Suite7_Ensuite bedroom		110	-	-	
Hotel_Suite6_Ensuite bedroom		110	-	-	
Hotel_Suite5_Ensuite bedroom		110	-	-	
Hotel_suite3_Ensuite bedroom		110	-	-	
Hotel_suite2_Ensuite bedroom		110	-	-	
Hotel_suite2_Ensuite bedroom		110	-	-	
Hotel_suite1_Ensuite bedroom		110	-	-	
Hotel_suite1_Ensuite bedroom		110	-	-	
Hotel_suite18_Ensuite bedroom		110	-	-	
Hotel_Suite17_Ensuite bedroom		110	-	-	
Hotel_suite16_Ensuite bedroom		110	-	-	
Hotel_Suite15_Ensuite bedroom		110	-	-	
Hotel_suite14_Ensuite bedroom		110	-	-	
Hotel_Suite13_Ensuite bedroom		110	-	-	
Hotel_suite12_Ensuite bedroom		110	-	-	
Hotel_suite4_Ensuite bedroom		110	-	-	
Hotel_Core_circulation 7		110	-	-	
Hotel_Corridor North		110	-	-	
Hotel_Corridor South		110	-	-	
Hotel Core_circulation 1		110	-	-	
Hotel Core_circulation 2		110	-	-	
Hotel Core_Stairwell 2		110	-	-	
Hotel Core_Stairwell 1		110	-	-	
Hotel Core_Stairwell 4		110	-	-	
Hotel Core_Stairwell 3		110	-	-	
Hotel Core_circulation 6		110	-	-	

General lighting and display lighting		General luminaire		Display light source	
Zone name		Efficacy [lm/W]		Efficacy [lm/W]	Power density [W/m ²]
	Standard value	95		80	0.3
Hotel Core_circulation 4		110		-	-
Hotel Core_circulation 5		110		-	-
Hotel Core_circulation 3		110		-	-
Hotel_Suite11_Ensuite bedroom		110		-	-
Hotel_Suite11_Ensuite bedroom		110		-	-
Hotel_Suite10_Ensuite bedroom		110		-	-
Hotel_Suite9_Ensuite bedroom		110		-	-
Hotel_suite8_Ensuite bedroom		110		-	-
Hotel_Suite7_Ensuite bedroom		110		-	-
Hotel_Suite6_Ensuite bedroom		110		-	-
Hotel_Suite5_Ensuite bedroom		110		-	-
Hotel_suite3_Ensuite bedroom		110		-	-
Hotel_suite2_Ensuite bedroom		110		-	-
Hotel_suite2_Ensuite bedroom		110		-	-
Hotel_suite1_Ensuite bedroom		110		-	-
Hotel_suite1_Ensuite bedroom		110		-	-
Hotel_suite18_Ensuite bedroom		110		-	-
Hotel_Suite17_Ensuite bedroom		110		-	-
Hotel_suite16_Ensuite bedroom		110		-	-
Hotel_Suite15_Ensuite bedroom		110		-	-
Hotel_suite14_Ensuite bedroom		110		-	-
Hotel_Suite13_Ensuite bedroom		110		-	-
Hotel_suite12_Ensuite bedroom		110		-	-
Hotel_suite4_Ensuite bedroom		110		-	-
Hotel_Core_circulation 7		110		-	-
Hotel_Corridor North		110		-	-
Hotel_Corridor South		110		-	-
Hotel Core_circulation 1		110		-	-
Hotel Core_circulation 2		110		-	-
Hotel Core_Stairwell 2		110		-	-
Hotel Core_Stairwell 1		110		-	-
Hotel Core_Stairwell 4		110		-	-
Hotel Core_Stairwell 3		110		-	-
Hotel Core_circulation 6		110		-	-
Hotel Core_circulation 4		110		-	-
Hotel Core_circulation 5		110		-	-
Hotel Core_circulation 3		110		-	-
Hotel_Suite11_Ensuite bedroom		110		-	-
Hotel_Suite11_Ensuite bedroom		110		-	-
Hotel_Suite10_Ensuite bedroom		110		-	-
Hotel_Suite9_Ensuite bedroom		110		-	-
Hotel_suite8_Ensuite bedroom		110		-	-
Hotel_Suite7_Ensuite bedroom		110		-	-

General lighting and display lighting		General luminaire	Display light source	
Zone name		Efficacy [lm/W]	Efficacy [lm/W]	Power density [W/m ²]
	Standard value	95	80	0.3
Hotel_Suite6_Ensuite bedroom		110	-	-
Hotel_Suite5_Ensuite bedroom		110	-	-
Hotel_suite3_Ensuite bedroom		110	-	-
Hotel_suite2_Ensuite bedroom		110	-	-
Hotel_suite2_Ensuite bedroom		110	-	-
Hotel_suite1_Ensuite bedroom		110	-	-
Hotel_suite1_Ensuite bedroom		110	-	-
Hotel_suite18_Ensuite bedroom		110	-	-
Hotel_Suite17_Ensuite bedroom		110	-	-
Hotel_suite16_Ensuite bedroom		110	-	-
Hotel_Suite15_Ensuite bedroom		110	-	-
Hotel_suite14_Ensuite bedroom		110	-	-
Hotel_Suite13_Ensuite bedroom		110	-	-
Hotel_suite12_Ensuite bedroom		110	-	-
Hotel_suite4_Ensuite bedroom		110	-	-

The spaces in the building should have appropriate passive control measures to limit solar gains in summer

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Hotel_Suite11_Ensuite bedroom	NO (-69.9%)	NO
Hotel_Suite11_Ensuite bedroom	NO (-58.1%)	NO
Hotel_Suite10_Ensuite bedroom	NO (-56%)	NO
Hotel_Suite9_Ensuite bedroom	NO (-55.3%)	NO
Hotel_suite8_Ensuite bedroom	NO (-32.2%)	NO
Hotel_Suite7_Ensuite bedroom	NO (-30.2%)	NO
Hotel_Suite6_Ensuite bedroom	NO (-62.6%)	NO
Hotel_Suite5_Ensuite bedroom	NO (-59.5%)	NO
Hotel_suite3_Ensuite bedroom	NO (-59.4%)	NO
Hotel_suite2_Ensuite bedroom	NO (-65.9%)	NO
Hotel_suite2_Ensuite bedroom	NO (-56%)	NO
Hotel_suite1_Ensuite bedroom	NO (-66.8%)	NO
Hotel_suite1_Ensuite bedroom	NO (-46.3%)	NO
Hotel_suite18_Ensuite bedroom	NO (-56.2%)	NO
Hotel_Suite17_Ensuite bedroom	NO (-27.3%)	NO
Hotel_suite16_Ensuite bedroom	NO (-3.4%)	NO
Hotel_Suite15_Ensuite bedroom	NO (-37.3%)	NO
Hotel_suite14_Ensuite bedroom	NO (-60.8%)	NO
Hotel_Suite13_Ensuite bedroom	NO (-58.1%)	NO
Hotel_suite12_Ensuite bedroom	NO (-59.2%)	NO
Hotel_suite4_Ensuite bedroom	NO (-59.8%)	NO
Hotel_Suite11_Ensuite bedroom	NO (-69.9%)	NO
Hotel_Suite11_Ensuite bedroom	NO (-58%)	NO
Hotel_Suite10_Ensuite bedroom	NO (-56.2%)	NO
Hotel_Suite9_Ensuite bedroom	NO (-55.3%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Hotel_suite8_Ensuite bedroom	NO (-32.2%)	NO
Hotel_Suite7_Ensuite bedroom	NO (-30.1%)	NO
Hotel_Suite6_Ensuite bedroom	NO (-62.6%)	NO
Hotel_Suite5_Ensuite bedroom	NO (-59.5%)	NO
Hotel_suite3_Ensuite bedroom	NO (-59.4%)	NO
Hotel_suite2_Ensuite bedroom	NO (-65.9%)	NO
Hotel_suite2_Ensuite bedroom	NO (-56%)	NO
Hotel_suite1_Ensuite bedroom	NO (-66.8%)	NO
Hotel_suite1_Ensuite bedroom	NO (-46.3%)	NO
Hotel_suite18_Ensuite bedroom	NO (-56.2%)	NO
Hotel_Suite17_Ensuite bedroom	NO (-27.3%)	NO
Hotel_suite16_Ensuite bedroom	NO (-3.4%)	NO
Hotel_Suite15_Ensuite bedroom	NO (-37.3%)	NO
Hotel_suite14_Ensuite bedroom	NO (-60.8%)	NO
Hotel_Suite13_Ensuite bedroom	NO (-58.1%)	NO
Hotel_suite12_Ensuite bedroom	NO (-59.2%)	NO
Hotel_suite4_Ensuite bedroom	NO (-59.8%)	NO
Hotel_Suite11_Ensuite bedroom	NO (-69.9%)	NO
Hotel_Suite11_Ensuite bedroom	NO (-58%)	NO
Hotel_Suite10_Ensuite bedroom	NO (-56.2%)	NO
Hotel_Suite9_Ensuite bedroom	NO (-55.3%)	NO
Hotel_suite8_Ensuite bedroom	NO (-32.2%)	NO
Hotel_Suite7_Ensuite bedroom	NO (-30%)	NO
Hotel_Suite6_Ensuite bedroom	NO (-62.6%)	NO
Hotel_Suite5_Ensuite bedroom	NO (-59.5%)	NO
Hotel_suite3_Ensuite bedroom	NO (-59.4%)	NO
Hotel_suite2_Ensuite bedroom	NO (-65.9%)	NO
Hotel_suite2_Ensuite bedroom	NO (-56%)	NO
Hotel_suite1_Ensuite bedroom	NO (-66.9%)	NO
Hotel_suite1_Ensuite bedroom	NO (-46.3%)	NO
Hotel_suite18_Ensuite bedroom	NO (-56.2%)	NO
Hotel_Suite17_Ensuite bedroom	NO (-27.3%)	NO
Hotel_suite16_Ensuite bedroom	NO (-3.4%)	NO
Hotel_Suite15_Ensuite bedroom	NO (-37.3%)	NO
Hotel_suite14_Ensuite bedroom	NO (-60.8%)	NO
Hotel_Suite13_Ensuite bedroom	NO (-58.1%)	NO
Hotel_suite12_Ensuite bedroom	NO (-59.2%)	NO
Hotel_suite4_Ensuite bedroom	NO (-59.8%)	NO
Hotel_Suite11_Ensuite bedroom	NO (-69.9%)	NO
Hotel_Suite11_Ensuite bedroom	NO (-58%)	NO
Hotel_Suite10_Ensuite bedroom	NO (-56.2%)	NO
Hotel_Suite9_Ensuite bedroom	NO (-55.3%)	NO
Hotel_suite8_Ensuite bedroom	NO (-32.2%)	NO
Hotel_Suite7_Ensuite bedroom	NO (-30%)	NO
Hotel_Suite6_Ensuite bedroom	NO (-62.6%)	NO
Hotel_Suite5_Ensuite bedroom	NO (-59.5%)	NO
Hotel_suite3_Ensuite bedroom	NO (-59.4%)	NO
Hotel_suite2_Ensuite bedroom	NO (-65.9%)	NO
Hotel_suite2_Ensuite bedroom	NO (-56%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Hotel_suite1_Ensuite bedroom	NO (-66.9%)	NO
Hotel_suite1_Ensuite bedroom	NO (-46.3%)	NO
Hotel_suite18_Ensuite bedroom	NO (-56.2%)	NO
Hotel_Suite17_Ensuite bedroom	NO (-27.3%)	NO
Hotel_suite16_Ensuite bedroom	NO (-3.4%)	NO
Hotel_Suite15_Ensuite bedroom	NO (-37.3%)	NO
Hotel_suite14_Ensuite bedroom	NO (-60.8%)	NO
Hotel_Suite13_Ensuite bedroom	NO (-58.1%)	NO
Hotel_suite12_Ensuite bedroom	NO (-59.2%)	NO
Hotel_suite4_Ensuite bedroom	NO (-59.8%)	NO
Hotel_Suite11_Ensuite bedroom	NO (-69.9%)	NO
Hotel_Suite11_Ensuite bedroom	NO (-58%)	NO
Hotel_Suite10_Ensuite bedroom	NO (-56.2%)	NO
Hotel_Suite9_Ensuite bedroom	NO (-55.3%)	NO
Hotel_suite8_Ensuite bedroom	NO (-32.2%)	NO
Hotel_Suite7_Ensuite bedroom	NO (-30%)	NO
Hotel_Suite6_Ensuite bedroom	NO (-62.6%)	NO
Hotel_Suite5_Ensuite bedroom	NO (-59.5%)	NO
Hotel_suite3_Ensuite bedroom	NO (-59.4%)	NO
Hotel_suite2_Ensuite bedroom	NO (-65.9%)	NO
Hotel_suite2_Ensuite bedroom	NO (-56%)	NO
Hotel_suite1_Ensuite bedroom	NO (-66.9%)	NO
Hotel_suite1_Ensuite bedroom	NO (-46.3%)	NO
Hotel_suite18_Ensuite bedroom	NO (-56.2%)	NO
Hotel_Suite17_Ensuite bedroom	NO (-27.3%)	NO
Hotel_suite16_Ensuite bedroom	NO (-3.4%)	NO
Hotel_Suite15_Ensuite bedroom	NO (-37.3%)	NO
Hotel_suite14_Ensuite bedroom	NO (-60.8%)	NO
Hotel_Suite13_Ensuite bedroom	NO (-58.1%)	NO
Hotel_suite12_Ensuite bedroom	NO (-59.2%)	NO
Hotel_suite4_Ensuite bedroom	NO (-59.8%)	NO
Hotel_Suite11_Ensuite bedroom	NO (-69.9%)	NO
Hotel_Suite11_Ensuite bedroom	NO (-58%)	NO
Hotel_Suite10_Ensuite bedroom	NO (-56.2%)	NO
Hotel_Suite9_Ensuite bedroom	NO (-55.3%)	NO
Hotel_suite8_Ensuite bedroom	NO (-32.2%)	NO
Hotel_Suite7_Ensuite bedroom	NO (-30%)	NO
Hotel_Suite6_Ensuite bedroom	NO (-62.6%)	NO
Hotel_Suite5_Ensuite bedroom	NO (-59.5%)	NO
Hotel_suite3_Ensuite bedroom	NO (-59.4%)	NO
Hotel_suite2_Ensuite bedroom	NO (-65.9%)	NO
Hotel_suite2_Ensuite bedroom	NO (-56.1%)	NO
Hotel_suite1_Ensuite bedroom	NO (-66.9%)	NO
Hotel_suite1_Ensuite bedroom	NO (-46.3%)	NO
Hotel_suite18_Ensuite bedroom	NO (-56.2%)	NO
Hotel_Suite17_Ensuite bedroom	NO (-27.3%)	NO
Hotel_suite16_Ensuite bedroom	NO (-3.4%)	NO
Hotel_Suite15_Ensuite bedroom	NO (-37.3%)	NO
Hotel_suite14_Ensuite bedroom	NO (-60.8%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Hotel_Suite13_Ensuite bedroom	NO (-58.1%)	NO
Hotel_suite12_Ensuite bedroom	NO (-59.2%)	NO
Hotel_suite4_Ensuite bedroom	NO (-59.8%)	NO
Hotel_Suite11_Ensuite bedroom	NO (-69.9%)	NO
Hotel_Suite11_Ensuite bedroom	NO (-58%)	NO
Hotel_Suite10_Ensuite bedroom	NO (-56.2%)	NO
Hotel_Suite9_Ensuite bedroom	NO (-55.3%)	NO
Hotel_suite8_Ensuite bedroom	NO (-32.2%)	NO
Hotel_Suite7_Ensuite bedroom	NO (-30%)	NO
Hotel_Suite6_Ensuite bedroom	NO (-62.6%)	NO
Hotel_Suite5_Ensuite bedroom	NO (-59.5%)	NO
Hotel_suite3_Ensuite bedroom	NO (-59.4%)	NO
Hotel_suite2_Ensuite bedroom	NO (-65.9%)	NO
Hotel_suite2_Ensuite bedroom	NO (-56.1%)	NO
Hotel_suite1_Ensuite bedroom	NO (-66.9%)	NO
Hotel_suite1_Ensuite bedroom	NO (-46.3%)	NO
Hotel_suite18_Ensuite bedroom	NO (-56.2%)	NO
Hotel_Suite17_Ensuite bedroom	NO (-27.3%)	NO
Hotel_suite16_Ensuite bedroom	NO (-3.4%)	NO
Hotel_Suite15_Ensuite bedroom	NO (-37.3%)	NO
Hotel_suite14_Ensuite bedroom	NO (-60.8%)	NO
Hotel_Suite13_Ensuite bedroom	NO (-58.1%)	NO
Hotel_suite12_Ensuite bedroom	NO (-59.2%)	NO
Hotel_suite4_Ensuite bedroom	NO (-59.8%)	NO
Hotel_Suite11_Ensuite bedroom	NO (-69.9%)	NO
Hotel_Suite11_Ensuite bedroom	NO (-58%)	NO
Hotel_Suite10_Ensuite bedroom	NO (-56.2%)	NO
Hotel_Suite9_Ensuite bedroom	NO (-55.3%)	NO
Hotel_suite8_Ensuite bedroom	NO (-32.2%)	NO
Hotel_Suite7_Ensuite bedroom	NO (-30%)	NO
Hotel_Suite6_Ensuite bedroom	NO (-62.6%)	NO
Hotel_Suite5_Ensuite bedroom	NO (-59.5%)	NO
Hotel_suite3_Ensuite bedroom	NO (-59.4%)	NO
Hotel_suite2_Ensuite bedroom	NO (-65.9%)	NO
Hotel_suite2_Ensuite bedroom	NO (-56.4%)	NO
Hotel_suite1_Ensuite bedroom	NO (-66.9%)	NO
Hotel_suite1_Ensuite bedroom	NO (-46.3%)	NO
Hotel_suite18_Ensuite bedroom	NO (-56.2%)	NO
Hotel_Suite17_Ensuite bedroom	NO (-27.3%)	NO
Hotel_suite16_Ensuite bedroom	NO (-3.4%)	NO
Hotel_Suite15_Ensuite bedroom	NO (-37.3%)	NO
Hotel_suite14_Ensuite bedroom	NO (-60.8%)	NO
Hotel_Suite13_Ensuite bedroom	NO (-58.1%)	NO
Hotel_suite12_Ensuite bedroom	NO (-59.2%)	NO
Hotel_suite4_Ensuite bedroom	NO (-59.8%)	NO
Hotel_Suite11_Ensuite bedroom	NO (-69.6%)	NO
Hotel_Suite11_Ensuite bedroom	NO (-58%)	NO
Hotel_Suite10_Ensuite bedroom	NO (-56.2%)	NO
Hotel_Suite9_Ensuite bedroom	NO (-55.3%)	NO

Zone	Solar gain limit exceeded? (%)	Internal blinds used?
Hotel_suite8_Ensuite bedroom	NO (-32.2%)	NO
Hotel_Suite7_Ensuite bedroom	NO (-30%)	NO
Hotel_Suite6_Ensuite bedroom	NO (-62.6%)	NO
Hotel_Suite5_Ensuite bedroom	NO (-59.5%)	NO
Hotel_suite3_Ensuite bedroom	NO (-59.4%)	NO
Hotel_suite2_Ensuite bedroom	NO (-65.9%)	NO
Hotel_suite2_Ensuite bedroom	NO (-56.9%)	NO
Hotel_suite1_Ensuite bedroom	NO (-67%)	NO
Hotel_suite1_Ensuite bedroom	NO (-46.3%)	NO
Hotel_suite18_Ensuite bedroom	NO (-56.2%)	NO
Hotel_Suite17_Ensuite bedroom	NO (-27.3%)	NO
Hotel_suite16_Ensuite bedroom	NO (-3.4%)	NO
Hotel_Suite15_Ensuite bedroom	NO (-37.3%)	NO
Hotel_suite14_Ensuite bedroom	NO (-60.8%)	NO
Hotel_Suite13_Ensuite bedroom	NO (-58.1%)	NO
Hotel_suite12_Ensuite bedroom	NO (-59.2%)	NO
Hotel_suite4_Ensuite bedroom	NO (-59.8%)	NO

Regulation 25A: Consideration of high efficiency alternative energy systems

Were alternative energy systems considered and analysed as part of the design process?	NO
Is evidence of such assessment available as a separate submission?	NO
Are any such measures included in the proposed design?	NO

Technical Data Sheet (Actual vs. Notional Building)

Building Global Parameters

	Actual	Notional
Floor area [m ²]	7845.8	7845.8
External area [m ²]	3797.2	3797.2
Weather	LON	LON
Infiltration [m ³ /hm ² @ 50Pa]	3	3
Average conductance [W/K]	2430.21	2502.94
Average U-value [W/m ² K]	0.64	0.66
Alpha value* [%]	25	10

* Percentage of the building's average heat transfer coefficient which is due to thermal bridging

Building Use

% Area Building Type

Retail/Financial and Professional Services
 Restaurants and Cafes/Drinking Establishments/Takeaways
 Offices and Workshop Businesses
 General Industrial and Special Industrial Groups
 Storage or Distribution

100 Hotels

Residential Institutions: Hospitals and Care Homes
 Residential Institutions: Residential Schools
 Residential Institutions: Universities and Colleges
 Secure Residential Institutions
 Residential Spaces
 Non-residential Institutions: Community/Day Centre
 Non-residential Institutions: Libraries, Museums, and Galleries
 Non-residential Institutions: Education
 Non-residential Institutions: Primary Health Care Building
 Non-residential Institutions: Crown and County Courts
 General Assembly and Leisure, Night Clubs, and Theatres
 Others: Passenger Terminals
 Others: Emergency Services
 Others: Miscellaneous 24hr Activities
 Others: Car Parks 24 hrs
 Others: Stand Alone Utility Block

Energy Consumption by End Use [kWh/m²]

	Actual	Notional
Heating	17.08	13.39
Cooling	1.16	1.15
Auxiliary	13.2	15.7
Lighting	4.71	6.08
Hot water	191.17	203.21
Equipment*	10.06	10.06
TOTAL **	227.32	239.52

* Energy used by equipment does not count towards the total for consumption or calculating emissions.

** Total is net of any electrical energy displaced by CHP generators, if applicable.

Energy Production by Technology [kWh/m²]

	Actual	Notional
Photovoltaic systems	1.66	2.48
Wind turbines	0	0
CHP generators	0	0
Solar thermal systems	0	0
<i>Displaced electricity</i>	<i>1.66</i>	<i>2.48</i>

Energy & CO₂ Emissions Summary

	Actual	Notional
Heating + cooling demand [MJ/m ²]	72.83	62.73
Primary energy [kWh _{PE} /m ²]	247.6	260.95
Total emissions [kg/m ²]	6.93	7.52

HVAC Systems Performance										
System Type	Heat dem MJ/m2	Cool dem MJ/m2	Heat con kWh/m2	Cool con kWh/m2	Aux con kWh/m2	Heat SSEFF	Cool SSEER	Heat gen SEFF	Cool gen SEER	
[ST] Fan coil systems, [HS] District heating, [HFT] District Heating, [CFT] Electricity										
	Actual	88.5	25	26.6	1.8	17.3	0.92	3.84	1	4.8
	Notional	68	29.8	20.9	1.8	24.1	0.91	4.63	----	----
[ST] No Heating or Cooling										
	Actual	0	0	0	0	0	0	0	0	0
	Notional	0	0	0	0	0	0	0	----	----

Key to terms

Heat dem [MJ/m2]	= Heating energy demand
Cool dem [MJ/m2]	= Cooling energy demand
Heat con [kWh/m2]	= Heating energy consumption
Cool con [kWh/m2]	= Cooling energy consumption
Aux con [kWh/m2]	= Auxiliary energy consumption
Heat SSEFF	= Heating system seasonal efficiency (for notional building, value depends on activity glazing class)
Cool SSEER	= Cooling system seasonal energy efficiency ratio
Heat gen SSEFF	= Heating generator seasonal efficiency
Cool gen SSEER	= Cooling generator seasonal energy efficiency ratio
ST	= System type
HS	= Heat source
HFT	= Heating fuel type
CFT	= Cooling fuel type