

## Leatherhead Road (166) - Without Trees

House	Room Activity	DA Threshold (lux, 50% of the Daylight Hours for 50% of the Area)	DA (%)	Result
House 1	Bedroom 1	100.00	100.00	Pass
	Bedroom 2	100.00	100.00	Pass
	Bedroom 3	100.00	100.00	Pass
	KLD	200.00	62.20	Pass
	Study/Snug	150.00	100	Pass
House 2	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	KLD	200.00	61.91	Pass
	Study/Snug	150.00	100	Pass
House 3	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	KLD	200.00	63.11	Pass
	Study/Snug	150.00	100	Pass
House 4	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	KLD	200.00	68.45	Pass
	Study/Snug	150.00	99.67	Pass
House 5	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	KLD	200.00	68.74	Pass
	Study/Snug	150.00	100	Pass
House 6	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	KLD	200.00	71.74	Pass
	Study/Snug	150.00	100.00	Pass
House 7	Bedroom 1	100.00	100.00	Pass
	Bedroom 2	100.00	100.00	Pass
	Bedroom 3	100.00	100.00	Pass
	KLD	200.00	100.00	Pass

Assumptions:		
Working plane: 0.85 m above floor		
Grid size: 0.25 m		
Working plane (AOI): 0.30 m from internal wall		
CIBSE 2016 London TRY Annual Hourly weather file		
Window Frames: Based on architectural drawings		
Glazing: light transmittance = 70%		
Reflectances		
1. Window frame: grey, reflectance = 35%		
2. Wall internal surface: offwhite plaster, reflectance = 70%		
3. Ceiling internal: white painted ceiling, reflectance = 80%		
4. Floor internal: Light grey, reflectance = 45%		
5. Wall external dark surface reflectance = 40%		
6. Wall external light surface reflectance = 60%		
7. Floor external: reflectance = 70%		
8. External Ground and Grass reflectance = 20%		
Passing Criteria (BRE Recommendations) (50% of time at 50% of space)		
Usage	Daylight Availability (lux)	
Kitchen	200	
Living/Dinning room/Study/Snug	150	
Combined Living/Kitchen and Studios	200	
Bedroom	100	
Results	No.	%
Pass	34	100.00
Fail	0	0.00
Total assessed rooms	34	100.00

## Leatherhead Road (166) - With Winter Bare Branch Trees

House	Room Activity	DA Threshold (lux, 50% of the Daylight Hours for 50% of the Area)	DA (%)	Result
House 1	Bedroom 1	100.00	100.00	Pass
	Bedroom 2	100.00	100.00	Pass
	Bedroom 3	100.00	100.00	Pass
	KLD	200.00	61.31	Pass
	Study/Snug	150.00	100	Pass
House 2	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	KLD	200.00	62.5	Pass
	Study/Snug	150.00	100	Pass
House 3	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	KLD	200.00	54.19	Pass
	Study/Snug	150.00	100	Pass
House 4	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	KLD	200.00	55.65	Pass
	Study/Snug	150.00	99.67	Pass
House 5	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	KLD	200.00	53.56	Pass
	Study/Snug	150.00	100	Pass
House 6	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	KLD	200.00	51.51	Pass
	Study/Snug	150.00	100.00	Pass
House 7	Bedroom 1	100.00	97.90	Pass
	Bedroom 2	100.00	100.00	Pass
	Bedroom 3	100.00	100.00	Pass
	KLD	200.00	100.00	Pass

Assumptions:		
Working plane: 0.85 m above floor		
Grid size: 0.25 m		
Working plane (AOI): 0.30 m from internal wall		
CIBSE 2016 London TRY Annual Hourly weather file		
Window Frames: Based on architectural drawings		
Glazing: light transmittance = 70%		
Reflectances		
1. Window frame: grey, reflectance = 35%		
2. Wall internal surface: offwhite plaster, reflectance = 70%		
3. Ceiling internal: white painted ceiling, reflectance = 80%		
4. Floor internal: Light grey, reflectance = 45%		
5. Wall external dark surface reflectance = 40%		
6. Wall external light surface reflectance = 60%		
7. Floor external: reflectance = 70%		
8. External Ground and Grass reflectance = 20%		
9. Winter Trees light transmittance = 65%		
10. Summer Trees light transmittance = 25%		
Passing Criteria (BRE Recommendations) (50% of time at 50% of space)		
Usage	Daylight Availability (lux)	
Kitchen	200	
Living/Dinning room/Study/Snug	150	
Combined Living/Kitchen and Studios	200	
Bedroom	100	
Reuslts	No.	%
Pass	34	100.00
Fail	0	0.00
Total assessed rooms	34	100.00

## Leatherhead Road (166) - With Summer Full Leaf Trees

House	Room Activity	DA Threshold (lux, 50% of the Daylight Hours for 50% of the Area)	DA (%)	Result
House 1	Bedroom 1	100.00	100.00	Pass
	Bedroom 2	100.00	100.00	Pass
	Bedroom 3	100.00	100.00	Pass
	KLD	200.00	61.61	Pass
	Study/Snug	150.00	100	Pass
House 2	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	KLD	200.00	61.91	Pass
	Study/Snug	150.00	100	Pass
House 3	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	KLD	200.00	38.41	Fail
	Study/Snug	150.00	100	Pass
House 4	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	KLD	200.00	35.71	Fail
	Study/Snug	150.00	99.67	Pass
House 5	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	KLD	200.00	32.43	Fail
	Study/Snug	150.00	100	Pass
House 6	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	KLD	200.00	27.99	Fail
	Study/Snug	150.00	100.00	Pass
House 7	Bedroom 1	100.00	76.92	Pass
	Bedroom 2	100.00	100.00	Pass
	Bedroom 3	100.00	100.00	Pass
	KLD	200.00	100.00	Pass

Assumptions:		
Working plane: 0.85 m above floor		
Grid size: 0.25 m		
Working plane (AOI): 0.30 m from internal wall		
CIBSE 2016 London TRY Annual Hourly weather file		
Window Frames: Based on architectural drawings		
Glazing: light transmittance = 70%		
Reflectances		
1. Window frame: grey, reflectance = 35%		
2. Wall internal surface: offwhite plaster, reflectance = 70%		
3. Ceiling internal: white painted ceiling, reflectance = 80%		
4. Floor internal: Light grey, reflectance = 45%		
5. Wall external dark surface reflectance = 40%		
6. Wall external light surface reflectance = 60%		
7. Floor external: reflectance = 70%		
8. External Ground and Grass reflectance = 20%		
9. Winter Trees light transmittance = 65%		
10. Summer Trees light transmittance = 25%		
Passing Criteria (BRE Recommendations) (50% of time at 50% of space)		
Usage	Daylight Availability (lux)	
Kitchen	200	
Living/Dinning room/Study/Snug	150	
Combined Living/Kitchen and Studios	200	
Bedroom	100	
Reuslts	No.	%
Pass	30	100.00
Fail	4	11.76
Total assessed rooms	34	100.00

## Leatherhead Road (166) - With Summer Full Leaf Trees - Assessed only Living/Dining area

House	Room Activity	DA Threshold (lux, 50% of the Daylight Hours for 50% of the Area)	DA (%)	Result
House 1	Bedroom 1	100.00	100.00	Pass
	Bedroom 2	100.00	100.00	Pass
	Bedroom 3	100.00	100.00	Pass
	KLD	200.00	60.42	Pass
	Study/Snug	150.00	100	Pass
House 2	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	KLD	200.00	62.2	Pass
	Study/Snug	150.00	100	Pass
House 3	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	LD	150.00	70.21	Pass
	Study/Snug	150.00	100	Pass
House 4	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	LD	150.00	66.85	Pass
	Study/Snug	150.00	100	Pass
House 5	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	LD	150.00	64.96	Pass
	Study/Snug	150.00	100	Pass
House 6	Bedroom 1	100.00	100	Pass
	Bedroom 2	100.00	100	Pass
	Bedroom 3	100.00	100	Pass
	LD	150.00	58.19	Pass
	Study/Snug	150.00	100.00	Pass
House 7	Bedroom 1	100.00	76.22	Pass
	Bedroom 2	100.00	100.00	Pass
	Bedroom 3	100.00	100.00	Pass
	KLD	200.00	100.00	Pass

Assumptions:		
Working plane: 0.85 m above floor		
Grid size: 0.25 m		
Working plane (AOI): 0.30 m from internal wall		
CIBSE 2016 London TRY Annual Hourly weather file		
Window Frames: Based on architectural drawings		
Glazing: light transmittance = 70%		
Reflectances		
1. Window frame: grey, reflectance = 35%		
2. Wall internal surface: offwhite plaster, reflectance = 70%		
3. Ceiling internal: white painted ceiling, reflectance = 80%		
4. Floor internal: Light grey, reflectance = 45%		
5. Wall external dark surface reflectance = 40%		
6. Wall external light surface reflectance = 60%		
7. Floor external: reflectance = 70%		
8. External Ground and Grass reflectance = 20%		
9. Winter Trees light transmittance = 65%		
10. Summer Trees light transmittance = 25%		
Passing Criteria (BRE Recommendations) (50% of time at 50% of space)		
Usage	Daylight Availability (lux)	
Kitchen	200	
Living/Dinning room/Study/Snug	150	
Combined Living/Kitchen and Studios	200	
Bedroom	100	
Reuslts	No.	%
Pass	34	100.00
Fail	0	0.00
Total assessed rooms	34	100.00