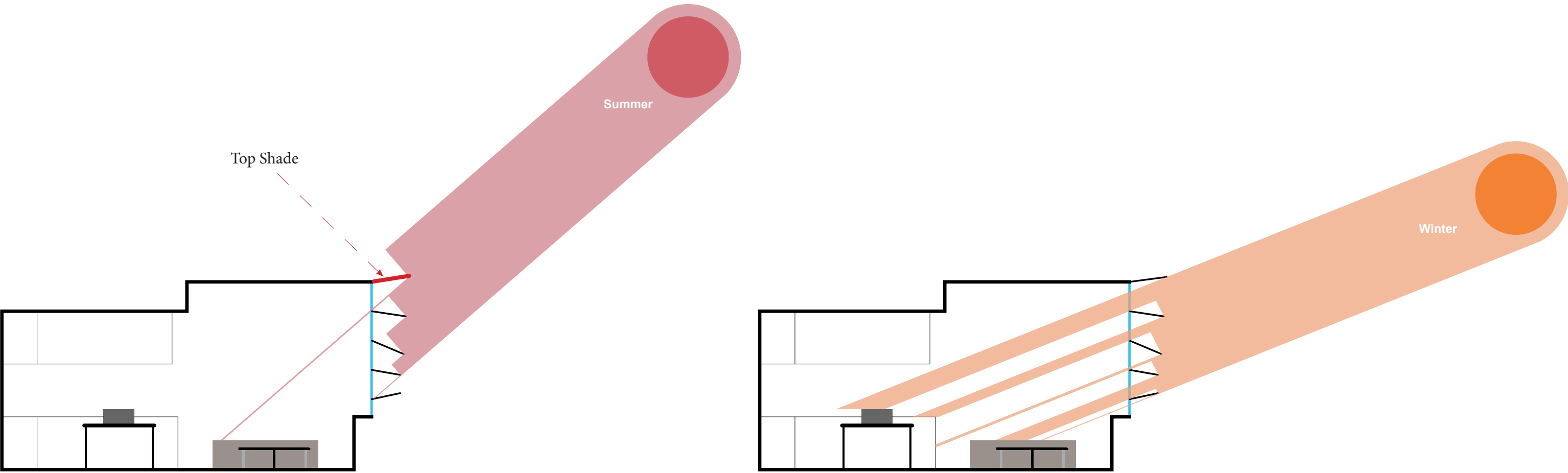


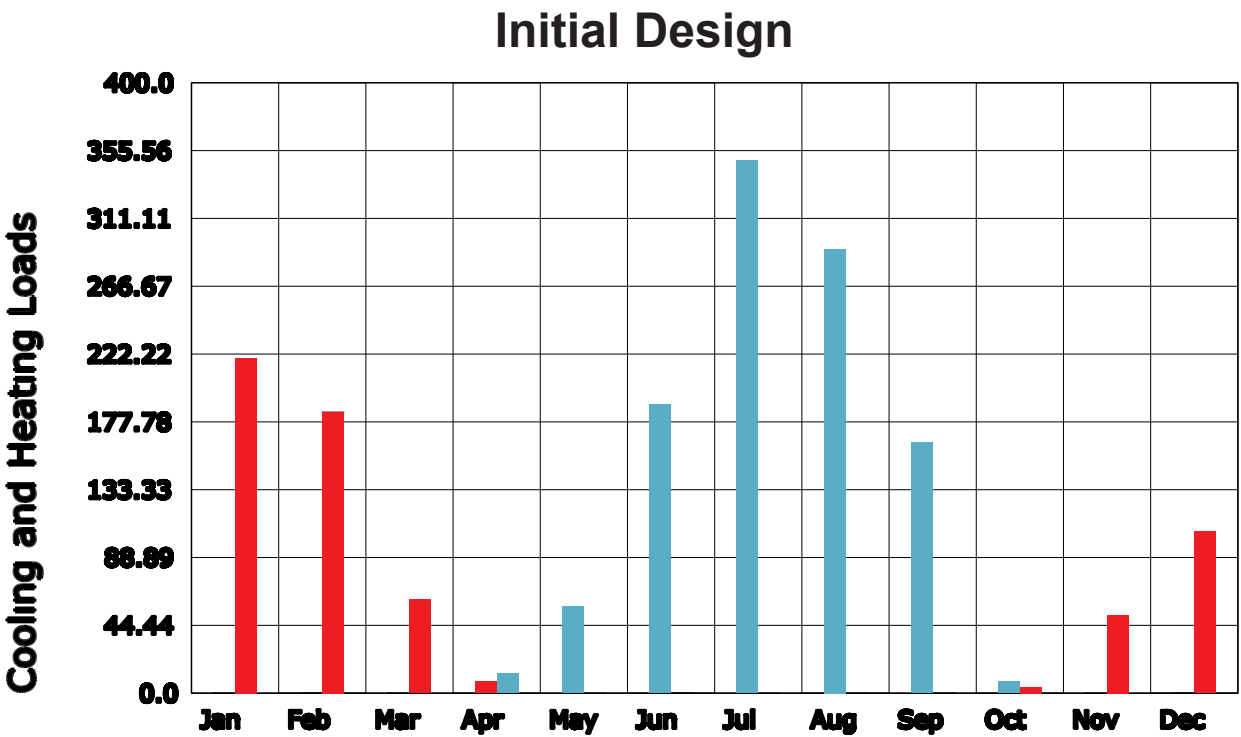
Basic Strategy and Concept

Based on the sun light altitude, overhangs of window can shade from summer sun while in warming winter rays. This could also help to save more energy by adjusting angles and length of top shade of window.

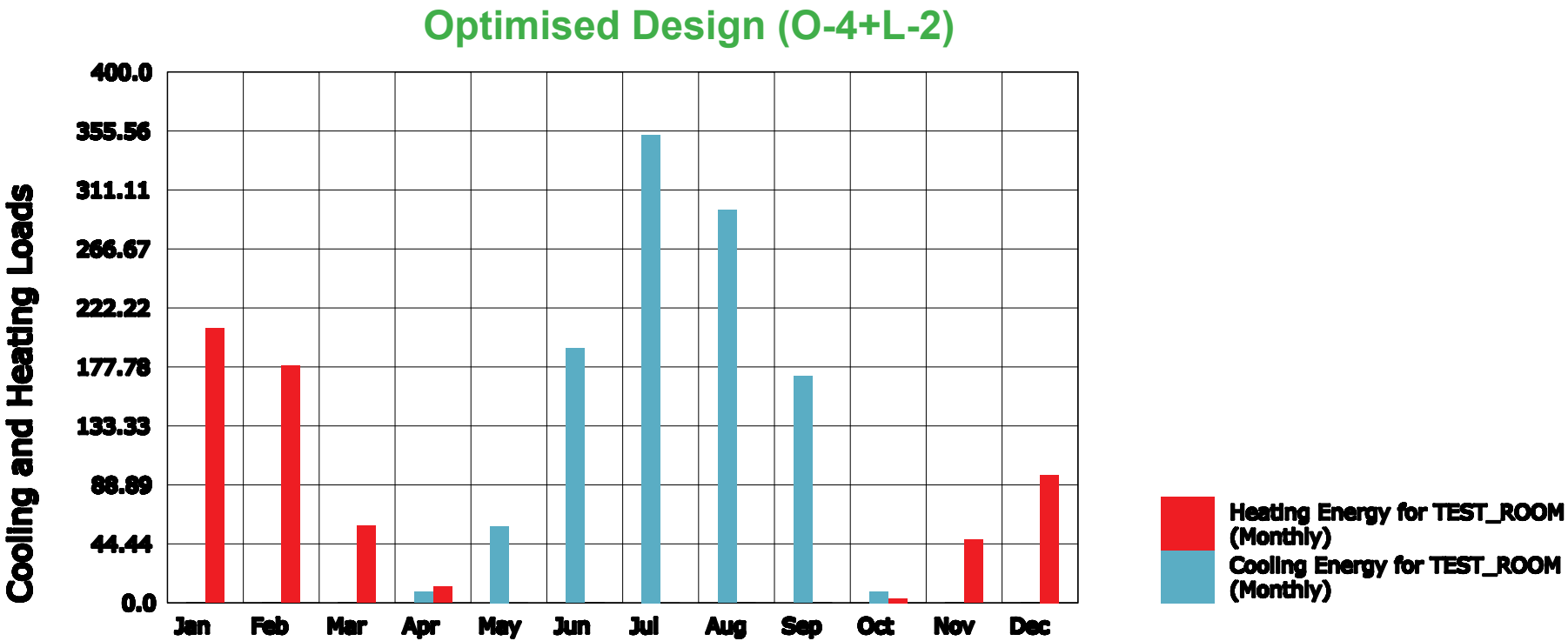


Data Comparison based on Angle and Length

	L-1(top shade length: 0.6m)			L-2(top shade length: 1.2m)			L-3(top shade length: 1.8m)		
	Total Cooling	Total Heating	Total	Total Cooling	Total Heating	Total	Total Cooling	Total Heating	Total
Initial Design	1065.42	638.99	1704.41						
O-1(5 degree higher)	1080.92	618.44	1699.36						
O-2(10 degree higher)	1099.46	596.71	1696.17						
O-3(15degree higher)	1120.00	575.35	1695.35	1069.69	630.73	1700.33	1046.95	662.13	1709.08
O-4(20degree higher)	1140.49	555.81	1696.30	1085.53	602.86	1688.39	1063.24	630.87	1694.11

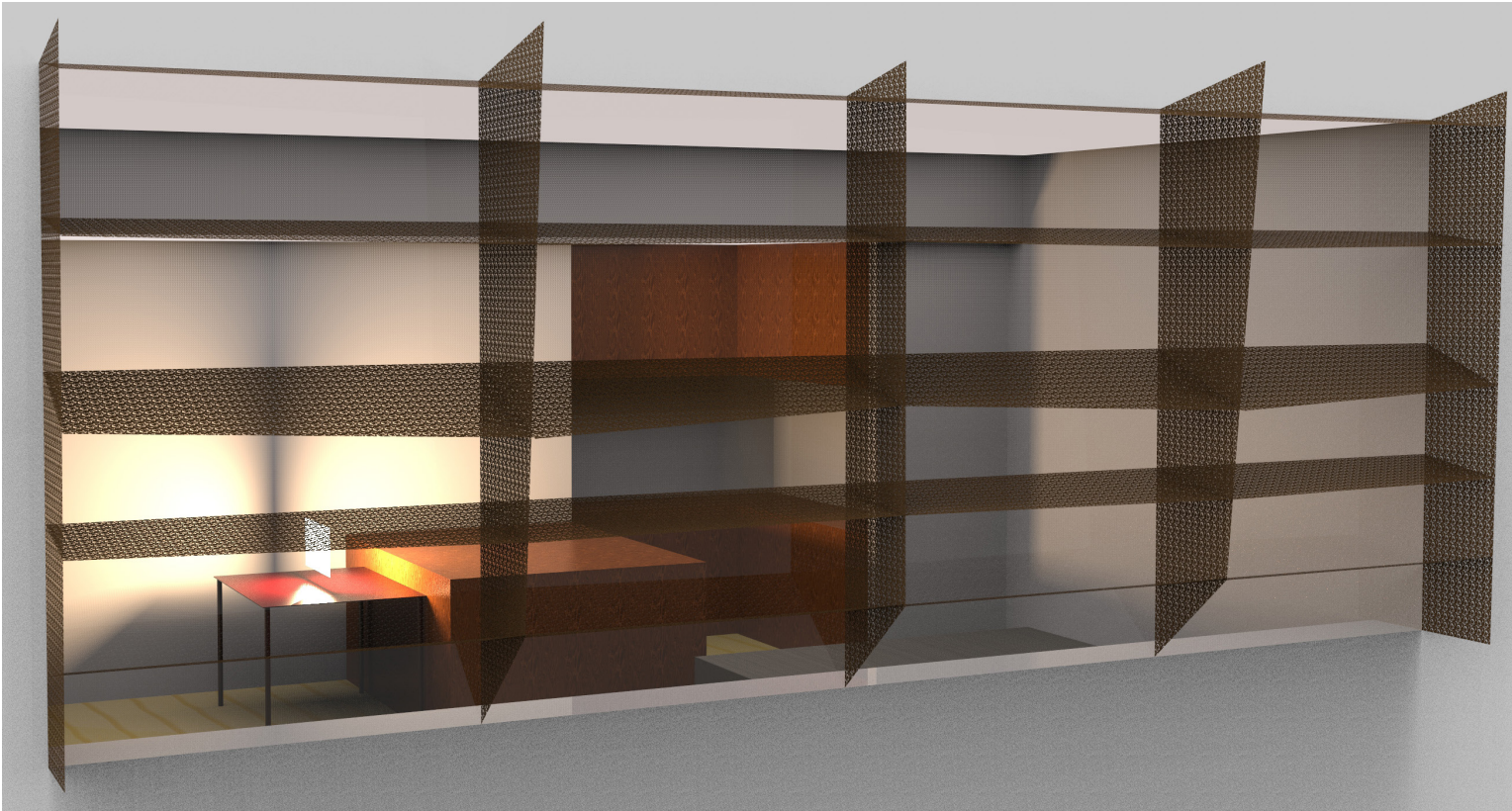


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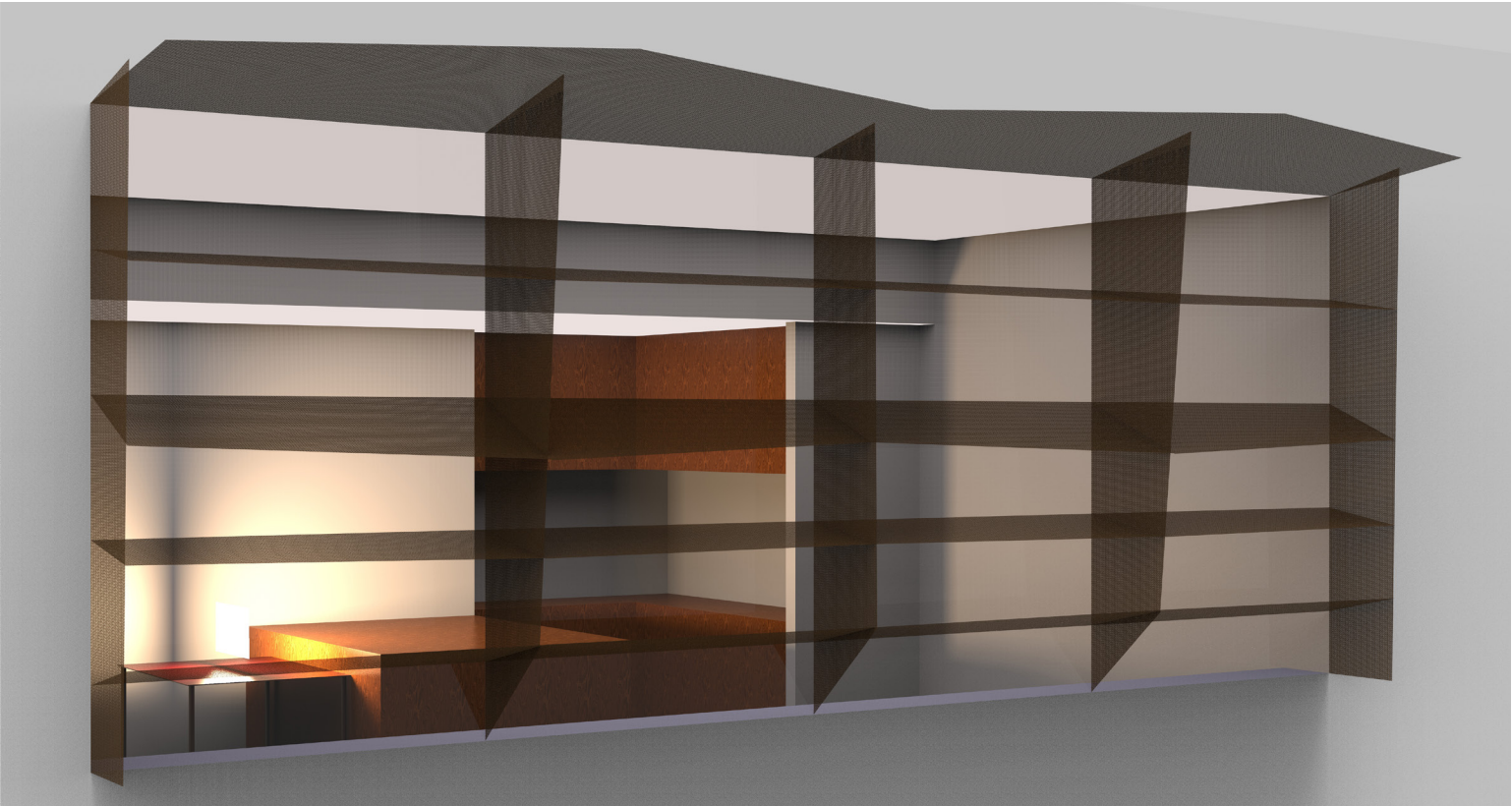


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Design Render Comparison



Initial Design



Optimized Design