

Table 5.X2(g) Predicted solar cooling loads for fast response building with single clear glazing: latitude 55.00 deg N/S; intermittent shading

| Date | Orientation | Solar cooling load at stated sun time / W·m ⁻² | | | | | | | | | | | Orientation |
|----------|-------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------------|
| | | 07:30 | 08:30 | 09:30 | 10:30 | 11:30 | 12:30 | 13:30 | 14:30 | 15:30 | 16:30 | 17:30 | |
| January | N | 6 | 7 | 18 | 27 | 34 | 37 | 37 | 34 | 27 | 18 | 7 | N |
| | NE | 6 | 8 | 23 | 31 | 35 | 38 | 37 | 34 | 28 | 19 | 7 | NE |
| | E | 14 | 21 | 216 | 49 | 140 | 68 | 50 | 44 | 36 | 26 | 15 | E |
| | SE | 18 | 104 | 196 | 247 | 246 | 205 | 67 | 150 | 62 | 32 | 19 | SE |
| | S | 24 | 28 | 243 | 243 | 290 | 300 | 274 | 214 | 72 | 122 | 28 | S |
| | SW | 18 | 19 | 32 | 62 | 274 | 226 | 252 | 233 | 156 | 50 | 26 | SW |
| | W | 14 | 15 | 26 | 36 | 44 | 51 | 68 | 229 | 49 | 128 | 21 | W |
| | NW | 6 | 7 | 19 | 28 | 34 | 37 | 38 | 35 | 31 | 23 | 8 | NW |
| Horiz. | 21 | 22 | 46 | 90 | 130 | 152 | 152 | 130 | 90 | 46 | 22 | Horiz. | |
| February | N | 10 | 23 | 34 | 42 | 48 | 51 | 51 | 48 | 42 | 34 | 23 | N |
| | NE | 15 | 70 | 60 | 52 | 54 | 54 | 53 | 51 | 45 | 37 | 26 | NE |
| | E | 102 | 183 | 204 | 164 | 52 | 88 | 64 | 56 | 49 | 40 | 29 | E |
| | SE | 109 | 220 | 297 | 320 | 299 | 242 | 161 | 54 | 73 | 50 | 36 | SE |
| | S | 31 | 195 | 232 | 303 | 346 | 356 | 332 | 276 | 195 | 69 | 94 | S |
| | SW | 23 | 36 | 51 | 156 | 198 | 270 | 313 | 316 | 272 | 170 | 55 | SW |
| | W | 16 | 30 | 40 | 49 | 57 | 65 | 184 | 187 | 204 | 150 | 48 | W |
| | NW | 13 | 26 | 37 | 46 | 51 | 53 | 54 | 54 | 52 | 60 | 70 | NW |
| Horiz. | 26 | 54 | 115 | 280 | 184 | 189 | 176 | 67 | 176 | 115 | 54 | Horiz. | |
| March | N | 36 | 48 | 56 | 63 | 67 | 69 | 69 | 67 | 63 | 56 | 48 | N |
| | NE | 252 | 59 | 130 | 81 | 81 | 79 | 78 | 75 | 70 | 63 | 53 | NE |
| | E | 260 | 304 | 286 | 219 | 81 | 125 | 97 | 89 | 82 | 74 | 65 | E |
| | SE | 240 | 325 | 367 | 368 | 331 | 261 | 96 | 174 | 97 | 83 | 70 | SE |
| | S | 58 | 249 | 254 | 319 | 358 | 367 | 345 | 294 | 219 | 81 | 133 | S |
| | SW | 51 | 65 | 78 | 93 | 312 | 289 | 346 | 368 | 349 | 289 | 187 | SW |
| | W | 47 | 59 | 68 | 76 | 83 | 91 | 235 | 246 | 293 | 288 | 213 | W |
| | NW | 50 | 62 | 72 | 79 | 84 | 87 | 88 | 90 | 90 | 228 | 68 | NW |
| Horiz. | 77 | 255 | 215 | 255 | 279 | 284 | 271 | 240 | 193 | 76 | 152 | Horiz. | |
| April | N | 72 | 80 | 85 | 89 | 93 | 95 | 95 | 93 | 89 | 85 | 80 | N |
| | NE | 236 | 189 | 84 | 123 | 116 | 114 | 112 | 108 | 104 | 97 | 89 | NE |
| | E | 359 | 370 | 332 | 256 | 110 | 159 | 131 | 123 | 117 | 110 | 102 | E |
| | SE | 295 | 355 | 380 | 369 | 325 | 252 | 105 | 163 | 121 | 109 | 98 | SE |
| | S | 72 | 216 | 227 | 288 | 324 | 332 | 312 | 265 | 195 | 75 | 116 | S |
| | SW | 78 | 90 | 101 | 113 | 278 | 278 | 339 | 370 | 365 | 325 | 253 | SW |
| | W | 82 | 92 | 99 | 106 | 113 | 121 | 270 | 282 | 343 | 361 | 327 | W |
| | NW | 71 | 81 | 89 | 95 | 100 | 103 | 106 | 108 | 203 | 206 | 232 | NW |
| Horiz. | 282 | 249 | 301 | 338 | 359 | 364 | 352 | 324 | 280 | 223 | 100 | Horiz. | |
| May | N | 125 | 120 | 124 | 127 | 130 | 131 | 131 | 130 | 127 | 124 | 120 | N |
| | NE | 293 | 239 | 115 | 166 | 145 | 142 | 139 | 137 | 132 | 126 | 119 | NE |
| | E | 400 | 396 | 352 | 274 | 129 | 180 | 154 | 147 | 141 | 134 | 127 | E |
| | SE | 294 | 342 | 359 | 344 | 297 | 225 | 100 | 148 | 126 | 116 | 105 | SE |
| | S | 86 | 108 | 313 | 257 | 290 | 298 | 279 | 235 | 93 | 185 | 108 | S |
| | SW | 87 | 97 | 107 | 117 | 242 | 250 | 311 | 345 | 347 | 317 | 258 | SW |
| | W | 107 | 115 | 122 | 129 | 135 | 142 | 288 | 298 | 363 | 390 | 376 | W |
| | NW | 100 | 109 | 116 | 121 | 127 | 129 | 132 | 135 | 261 | 256 | 294 | NW |
| Horiz. | 247 | 305 | 353 | 386 | 402 | 405 | 397 | 373 | 333 | 281 | 221 | Horiz. | |
| June | N | 143 | 133 | 137 | 139 | 142 | 143 | 143 | 142 | 139 | 137 | 133 | N |
| | NE | 307 | 252 | 124 | 179 | 153 | 151 | 148 | 144 | 140 | 135 | 128 | NE |
| | E | 406 | 401 | 355 | 277 | 134 | 185 | 160 | 153 | 147 | 141 | 133 | E |
| | SE | 291 | 336 | 352 | 335 | 289 | 218 | 98 | 145 | 127 | 117 | 107 | SE |
| | S | 87 | 105 | 295 | 245 | 278 | 286 | 267 | 224 | 90 | 175 | 105 | S |
| | SW | 89 | 99 | 108 | 119 | 234 | 242 | 303 | 337 | 340 | 312 | 255 | SW |
| | W | 113 | 121 | 128 | 135 | 141 | 148 | 291 | 301 | 366 | 395 | 383 | W |
| | NW | 109 | 117 | 125 | 130 | 134 | 137 | 140 | 143 | 277 | 269 | 308 | NW |
| Horiz. | 263 | 320 | 367 | 398 | 413 | 415 | 408 | 386 | 348 | 296 | 237 | Horiz. | |
| July | N | 137 | 128 | 132 | 135 | 138 | 139 | 139 | 138 | 135 | 132 | 128 | N |
| | NE | 302 | 248 | 121 | 174 | 151 | 148 | 145 | 142 | 137 | 132 | 124 | NE |
| | E | 403 | 399 | 354 | 276 | 132 | 183 | 158 | 152 | 145 | 138 | 131 | E |
| | SE | 291 | 338 | 353 | 338 | 291 | 220 | 99 | 146 | 126 | 117 | 106 | SE |
| | S | 86 | 105 | 299 | 249 | 282 | 289 | 271 | 227 | 90 | 178 | 105 | S |
| | SW | 88 | 98 | 108 | 118 | 237 | 244 | 305 | 339 | 342 | 312 | 255 | SW |
| | W | 110 | 119 | 126 | 133 | 140 | 146 | 290 | 300 | 365 | 393 | 380 | W |
| | NW | 106 | 114 | 122 | 127 | 132 | 135 | 138 | 140 | 272 | 264 | 303 | NW |
| Horiz. | 257 | 315 | 362 | 393 | 409 | 412 | 403 | 381 | 343 | 290 | 231 | Horiz. | |
| August | N | 88 | 92 | 98 | 102 | 104 | 106 | 106 | 104 | 102 | 98 | 92 | N |
| | NE | 258 | 209 | 97 | 140 | 128 | 125 | 123 | 120 | 115 | 109 | 102 | NE |
| | E | 375 | 380 | 341 | 264 | 118 | 168 | 141 | 134 | 127 | 120 | 113 | E |
| | SE | 297 | 351 | 372 | 360 | 315 | 242 | 105 | 157 | 125 | 114 | 103 | SE |
| | S | 74 | 199 | 213 | 271 | 306 | 314 | 295 | 249 | 183 | 71 | 108 | S |
| | SW | 84 | 94 | 106 | 117 | 263 | 267 | 329 | 361 | 359 | 323 | 257 | SW |
| | W | 92 | 102 | 109 | 117 | 123 | 130 | 277 | 289 | 351 | 372 | 347 | W |
| | NW | 83 | 93 | 100 | 106 | 111 | 114 | 116 | 119 | 225 | 226 | 256 | NW |
| Horiz. | 324 | 273 | 323 | 359 | 378 | 382 | 372 | 345 | 303 | 248 | 114 | Horiz. | |

Table 5.X2(g) Predicted solar cooling loads for fast response building with single clear glazing: latitude 55.00 deg N/S; intermittent shading
— continued

| Date | Orientation | Solar cooling load at stated sun time / W·m ⁻² | | | | | | | | | | | Orientation |
|----------------------------|-------------|---|-------|---------------|-------|-------|-------|-------|------|------|-------|--------|-------------|
| | | 07:30 | 08:30 | 09:30 | 10:30 | 11:30 | 12:30 | 13:30 | 1430 | 1530 | 16:30 | 17:30 | |
| September | N | 46 | 56 | 64 | 69 | 73 | 75 | 75 | 73 | 69 | 64 | 56 | N |
| | NE | 178 | 76 | 158 | 97 | 95 | 93 | 91 | 88 | 84 | 77 | 68 | NE |
| | E | 298 | 328 | 302 | 232 | 91 | 137 | 109 | 101 | 94 | 87 | 78 | E |
| | SE | 262 | 336 | 372 | 368 | 328 | 257 | 98 | 169 | 104 | 92 | 79 | SE |
| | S | 62 | 239 | 245 | 308 | 346 | 354 | 333 | 284 | 212 | 79 | 128 | S |
| | SW | 60 | 72 | 85 | 98 | 298 | 283 | 342 | 367 | 355 | 303 | 214 | SW |
| | W | 59 | 70 | 79 | 86 | 94 | 101 | 247 | 258 | 311 | 314 | 258 | W |
| | NW | 51 | 62 | 71 | 78 | 83 | 85 | 87 | 89 | 91 | 256 | 168 | NW |
| Horiz. | 109 | 306 | 244 | 283 | 306 | 311 | 298 | 268 | 223 | 90 | 188 | Horiz. | |
| October | N | 17 | 32 | 42 | 50 | 54 | 57 | 57 | 54 | 50 | 42 | 32 | N |
| | NE | 48 | 114 | 83 | 63 | 63 | 63 | 62 | 59 | 54 | 47 | 36 | NE |
| | E | 199 | 230 | 234 | 183 | 60 | 99 | 73 | 65 | 58 | 50 | 39 | E |
| | SE | 195 | 265 | 325 | 338 | 310 | 248 | 163 | 57 | 78 | 60 | 46 | SE |
| | S | 44 | 230 | 246 | 314 | 354 | 364 | 341 | 288 | 211 | 76 | 119 | S |
| | SW | 34 | 49 | 64 | 161 | 204 | 281 | 329 | 341 | 309 | 226 | 78 | SW |
| | W | 29 | 43 | 53 | 62 | 69 | 77 | 207 | 214 | 244 | 211 | 73 | W |
| | NW | 23 | 38 | 49 | 56 | 61 | 64 | 65 | 65 | 65 | 85 | 116 | NW |
| Horiz. | 34 | 83 | 254 | 192 | 215 | 221 | 207 | 177 | 66 | 153 | 83 | Horiz. | |
| November | N | 7 | 10 | 23 | 32 | 38 | 41 | 41 | 38 | 32 | 23 | 10 | N |
| | NE | 7 | 17 | 32 | 37 | 40 | 42 | 41 | 38 | 33 | 24 | 11 | NE |
| | E | 11 | 128 | 149 | 129 | 41 | 71 | 51 | 44 | 37 | 28 | 14 | E |
| | SE | 18 | 164 | 230 | 271 | 262 | 216 | 146 | 47 | 65 | 37 | 22 | SE |
| | S | 28 | 47 | 297 | 267 | 312 | 322 | 297 | 239 | 83 | 161 | 47 | S |
| | SW | 18 | 22 | 37 | 141 | 178 | 239 | 271 | 260 | 195 | 62 | 55 | SW |
| | W | 11 | 14 | 28 | 37 | 44 | 51 | 148 | 144 | 137 | 45 | 44 | W |
| | NW | 7 | 11 | 24 | 33 | 38 | 41 | 42 | 40 | 37 | 32 | 17 | NW |
| Horiz. | 20 | 25 | 61 | 112 | 236 | 136 | 53 | 154 | 112 | 61 | 25 | Horiz. | |
| December | N | 4 | 4 | 9 | 20 | 26 | 29 | 29 | 26 | 20 | 9 | 4 | N |
| | NE | 4 | 4 | 10 | 21 | 27 | 29 | 29 | 26 | 20 | 10 | 4 | NE |
| | E | 11 | 11 | 51 | 123 | 109 | 54 | 40 | 34 | 27 | 16 | 11 | E |
| | SE | 15 | 15 | 172 | 194 | 204 | 173 | 56 | 127 | 49 | 21 | 15 | SE |
| | S | 16 | 16 | 142 | 191 | 240 | 251 | 224 | 159 | 51 | 56 | 16 | S |
| | SW | 15 | 15 | 21 | 49 | 231 | 190 | 206 | 173 | 56 | 70 | 15 | SW |
| | W | 11 | 11 | 16 | 27 | 34 | 40 | 54 | 109 | 123 | 51 | 11 | W |
| | NW | 4 | 4 | 10 | 20 | 26 | 29 | 29 | 27 | 21 | 10 | 4 | NW |
| Horiz. | 13 | 13 | 21 | 51 | 85 | 103 | 103 | 85 | 51 | 21 | 13 | Horiz. | |
| Air node correction factor | | Fast response | | Slow response | | | | | | | | | |
| — internal blind | | 0.91 | | 0.88 | | | | | | | | | |
| — mid-pane blind | | 0.87 | | 0.83 | | | | | | | | | |
| — external blind | | 0.88 | | 0.85 | | | | | | | | | |