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## ZHANJIANG, China

WMO#: **596580**

Lat: **21.22N** Long: **110.40E** Elev: **28** StdP: **100.99** Time Zone: **8.00 (CHN)** Period: **86-10** WBAN: **99999**

### Annual Heating and Humidification Design Conditions

| | Coldest Month | Heating DB | | Humidification DP/MCDB and HR | | | | | | Coldest month WS/MCDB | | | | MCWS/PCWD to 99.6% DB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | 99.6% | | | 99% | | | 0.4% | | 1% | | | | |
| | | 99.6% | 99% | DP | HR | MCDB | DP | HR | MCDB | WS | MCDB | WS | MCDB | MCWS | PCWD | |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) | (n) | (o) | |
| (1) | **1** | **7.7** | **9.2** | **0.8** | **4.0** | **13.6** | **3.0** | **4.7** | **12.9** | **8.5** | **14.1** | **7.9** | **14.3** | **4.3** | **0** | (1) |

### Annual Cooling, Dehumidification, and Enthalpy Design Conditions

| | Hottest Month | Hottest Month DB Range | Cooling DB/MCWB | | | | | | Evaporation WB/MCDB | | | | | | MCWS/PCWD to 0.4% DB | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0.4% | | 1% | | 2% | | 0.4% | | 1% | | 2% | | | | |
| | | | DB | MCWB | DB | MCWB | DB | MCWB | WB | MCDB | WB | MCDB | WB | MCDB | MCWS | PCWD | |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) | (n) | (o) | (p) | |
| (2) | **7** | **4.8** | **33.9** | **26.7** | **33.1** | **26.8** | **32.4** | **26.7** | **28.1** | **31.2** | **27.7** | **30.8** | **27.5** | **30.5** | **3.3** | **220** | (2) |

| | Dehumidification DP/MCDB and HR | | | | | | | | | Enthalpy/MCDB | | | | | | Hours 8 to 4 & 12.8/20.6 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 0.4% | | | 1% | | | 2% | | | 0.4% | | 1% | | 2% | | | |
| | DP | HR | MCDB | DP | HR | MCDB | DP | HR | MCDB | Enth | MCDB | Enth | MCDB | Enth | MCDB | | |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) | (n) | (o) | (p) | |
| (3) | **27.3** | **23.2** | **29.6** | **27.0** | **22.8** | **29.4** | **26.7** | **22.4** | **29.2** | **90.7** | **31.3** | **89.2** | **31.0** | **87.9** | **30.7** | **671** | (3) |

### Extreme Annual Design Conditions

| | Extreme Annual WS | | | Extreme Max WB | Extreme Annual DB | | | | n-Year Return Period Values of Extreme DB | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Mean | | Standard deviation | | n=5 years | | n=10 years | | n=20 years | | n=50 years | | |
| | 1% | 2.5% | 5% | | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | Min | Max | |
| | (a) | (b) | (c) | (d) | (e) | (f) | (g) | (h) | (i) | (j) | (k) | (l) | (m) | (n) | (o) | (p) | |
| (4) | **8.0** | **6.8** | **6.0** | **29.7** | **6.4** | **35.5** | **1.4** | **0.8** | **5.4** | **36.1** | **4.6** | **36.5** | **3.8** | **37.0** | **2.8** | **37.5** | (4) |

### Monthly Climatic Design Conditions

| | | | | Annual (d) | Jan (e) | Feb (f) | Mar (g) | Apr (h) | May (i) | Jun (j) | Jul (k) | Aug (l) | Sep (m) | Oct (n) | Nov (o) | Dec (p) | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| (5) | Temperatures, Degree-Days and Degree-Hours | Tavg | | **23.9** | **16.4** | **17.4** | **20.2** | **24.0** | **27.3** | **29.0** | **29.3** | **28.9** | **27.9** | **25.8** | **22.0** | **18.4** | (5) |
| (6) | | Sd | | | **3.49** | **4.02** | **3.72** | **3.25** | **2.11** | **1.63** | **1.47** | **1.41** | **1.63** | **2.03** | **2.86** | **3.03** | (6) |
| (7) | | HDD10.0 | | **6** | **2** | **2** | **1** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **0** | **1** | (7) |
| (8) | | HDD18.3 | | **207** | **77** | **58** | **26** | **4** | **0** | **0** | **0** | **0** | **0** | **0** | **6** | **36** | (8) |
| (9) | | CDD10.0 | | **5080** | **202** | **210** | **315** | **419** | **536** | **568** | **598** | **587** | **536** | **489** | **359** | **260** | (9) |
| (10) | | CDD18.3 | | **2240** | **18** | **33** | **82** | **173** | **278** | **318** | **339** | **329** | **286** | **232** | **115** | **37** | (10) |
| (11) | | CDH23.3 | | **21626** | **6** | **45** | **225** | **1084** | **2801** | **3839** | **4224** | **3929** | **3078** | **1869** | **474** | **50** | (11) |
| (12) | | CDH26.7 | | **7571** | **0** | **7** | **34** | **223** | **859** | **1578** | **1820** | **1565** | **1031** | **402** | **49** | **2** | (12) |
| (13) | Precipitation | PrecAvg | | **1634** | **26** | **42** | **54** | **138** | **186** | **256** | **198** | **288** | **261** | **125** | **43** | **18** | (13) |
| (14) | | PrecMax | | **2411** | **109** | **174** | **126** | **396** | **584** | **711** | **630** | **907** | **643** | **316** | **206** | **107** | (14) |
| (15) | | PrecMin | | **1152** | **0** | **1** | **3** | **3** | **42** | **89** | **21** | **34** | **35** | **1** | **0** | **0** | (15) |
| (16) | | PrecSD | | **313.2** | **29.7** | **47.0** | **38.6** | **105.7** | **103.8** | **145.9** | **123.4** | **176.9** | **148.3** | **62.8** | **54.2** | **20.2** | (16) |
| (17) | Monthly Design Dry Bulb and Mean Coincident Wet Bulb Temperatures | 0.4% | DB | | **24.2** | **27.4** | **29.7** | **32.7** | **34.2** | **34.5** | **34.9** | **34.5** | **33.6** | **31.5** | **29.4** | **26.4** | (17) |
| (18) | | | MCWB | | **20.2** | **22.3** | **23.9** | **26.0** | **26.5** | **26.7** | **26.7** | **26.5** | **26.2** | **24.6** | **23.6** | **21.8** | (18) |
| (19) | | 2% | DB | | **22.8** | **24.4** | **27.4** | **30.5** | **32.4** | **33.4** | **33.8** | **33.4** | **32.5** | **30.5** | **28.1** | **24.6** | (19) |
| (20) | | | MCWB | | **19.3** | **21.4** | **23.7** | **25.8** | **26.7** | **26.8** | **27.0** | **26.7** | **26.2** | **24.5** | **23.0** | **20.5** | (20) |
| (21) | | 5% | DB | | **21.6** | **23.1** | **25.7** | **29.1** | **31.2** | **32.5** | **32.9** | **32.6** | **31.7** | **29.7** | **26.9** | **23.5** | (21) |
| (22) | | | MCWB | | **18.7** | **20.5** | **23.1** | **25.2** | **26.5** | **26.9** | **27.0** | **26.8** | **25.9** | **24.3** | **22.1** | **19.5** | (22) |
| (23) | | 10% | DB | | **20.7** | **22.0** | **24.2** | **27.9** | **30.3** | **31.7** | **32.1** | **31.7** | **30.8** | **28.8** | **25.9** | **22.3** | (23) |
| (24) | | | MCWB | | **18.2** | **20.1** | **22.4** | **24.9** | **26.3** | **26.9** | **26.9** | **26.7** | **25.6** | **23.8** | **21.5** | **18.5** | (24) |
| (25) | Monthly Design Wet Bulb and Mean Coincident Dry Bulb Temperatures | 0.4% | WB | | **21.3** | **23.1** | **24.9** | **26.9** | **28.1** | **28.6** | **28.5** | **28.2** | **27.8** | **26.4** | **25.2** | **23.9** | (25) |
| (26) | | | MCDB | | **23.0** | **25.6** | **28.0** | **30.2** | **31.1** | **31.9** | **31.7** | **31.1** | **30.8** | **29.3** | **27.4** | **25.3** | (26) |
| (27) | | 2% | WB | | **20.4** | **22.1** | **24.1** | **26.2** | **27.6** | **28.1** | **28.0** | **27.7** | **27.3** | **25.9** | **24.6** | **22.1** | (27) |
| (28) | | | MCDB | | **21.7** | **23.8** | **26.3** | **29.1** | **30.4** | **31.1** | **31.3** | **30.8** | **30.3** | **28.5** | **26.6** | **23.6** | (28) |
| (29) | | 5% | WB | | **19.6** | **21.3** | **23.4** | **25.7** | **27.1** | **27.7** | **27.7** | **27.5** | **26.9** | **25.5** | **23.8** | **20.8** | (29) |
| (30) | | | MCDB | | **20.9** | **22.6** | **25.3** | **28.2** | **29.8** | **30.5** | **30.9** | **30.5** | **29.8** | **28.0** | **25.8** | **22.4** | (30) |
| (31) | | 10% | WB | | **19.0** | **20.6** | **22.7** | **25.2** | **26.7** | **27.4** | **27.3** | **27.2** | **26.5** | **25.1** | **23.1** | **19.6** | (31) |
| (32) | | | MCDB | | **20.3** | **21.8** | **24.2** | **27.4** | **29.3** | **30.2** | **30.5** | **30.1** | **29.4** | **27.5** | **25.2** | **21.4** | (32) |
| (33) | Mean Daily Temperature Range | | MDBR | | **5.2** | **4.4** | **4.4** | **4.3** | **4.7** | **4.8** | **4.8** | **5.0** | **5.2** | **5.4** | **6.0** | **6.0** | (33) |
| (34) | | 5% DB | MCDBR | | **5.7** | **5.9** | **6.1** | **6.1** | **5.9** | **5.7** | **6.1** | **6.1** | **6.2** | **5.9** | **6.3** | **6.6** | (34) |
| (35) | | | MCWBR | | **2.9** | **2.8** | **2.9** | **2.3** | **2.1** | **1.9** | **1.9** | **2.0** | **2.2** | **2.0** | **2.6** | **2.9** | (35) |
| (36) | | 5% WB | MCDBR | | **4.7** | **5.0** | **5.8** | **5.6** | **5.3** | **4.9** | **5.3** | **5.2** | **5.4** | **4.7** | **5.0** | **5.0** | (36) |
| (37) | | | MCWBR | | **2.9** | **2.9** | **3.2** | **2.5** | **2.3** | **2.2** | **2.1** | **2.2** | **2.3** | **1.8** | **2.4** | **3.1** | (37) |
| (38) | Clear Sky Solar Irradiance | taub | | | **0.609** | **0.663** | **0.776** | **0.702** | **0.551** | **0.532** | **0.532** | **0.585** | **0.639** | **0.648** | **0.571** | **0.570** | (38) |
| (39) | | taud | | | **1.852** | **1.716** | **1.510** | **1.608** | **1.942** | **1.981** | **1.981** | **1.863** | **1.773** | **1.789** | **1.980** | **1.962** | (39) |
| (40) | | Ebn,noon | | | **665** | **658** | **607** | **666** | **769** | **777** | **778** | **740** | **692** | **660** | **693** | **681** | (40) |
| (41) | | Edh,noon | | | **191** | **230** | **294** | **269** | **191** | **182** | **183** | **206** | **222** | **211** | **166** | **166** | (41) |

Nomenclature: See separate page