

## LAKE TAHOE, CA, USA

WMO#: 725847

Lat: **38.89N** Long: **120.00W** Elev: **1912** StdP: **80.37** Time Zone: **-8.00 (NAP)** Period: **00-10** WBAN: **93230**

## 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)
<b>1</b>	<b>-16.2</b>	<b>-12.9</b>	<b>-19.1</b>	<b>0.9</b>	<b>-8.3</b>	<b>-17.2</b>	<b>1.0</b>	<b>-7.1</b>	<b>11.7</b>	<b>2.7</b>	<b>10.4</b>	<b>2.9</b>	<b>1.2</b>	<b>190</b>

## 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)
<b>7</b>	<b>19.9</b>	<b>28.8</b>	<b>13.7</b>	<b>27.6</b>	<b>13.0</b>	<b>26.5</b>	<b>12.5</b>	<b>15.4</b>	<b>25.7</b>	<b>14.5</b>	<b>25.0</b>	<b>13.6</b>	<b>24.3</b>	<b>3.7</b>	<b>30</b>

Dehumidification DP/MCDB and HR														Hours 8 to 4 & 12.8/20.6	
0.4%			1%			2%			0.4%			1%			
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)
<b>11.7</b>	<b>10.8</b>	<b>19.0</b>	<b>9.9</b>	<b>9.6</b>	<b>18.4</b>	<b>8.4</b>	<b>8.6</b>	<b>18.0</b>	<b>49.5</b>	<b>25.5</b>	<b>46.4</b>	<b>24.6</b>	<b>43.6</b>	<b>24.0</b>	<b>731</b>

## 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	Min	Max	
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)			
<b>9.4</b>	<b>8.2</b>	<b>7.2</b>	<b>18.4</b>	<b>-21.6</b>	<b>31.6</b>	<b>1.8</b>	<b>1.0</b>	<b>-22.9</b>	<b>32.4</b>	<b>-23.9</b>	<b>33.0</b>	<b>-24.9</b>	<b>33.5</b>	<b>-26.2</b>	<b>34.3</b>			

## 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	<b>6.5</b>	<b>-1.8</b>	<b>-1.0</b>	<b>1.6</b>	<b>3.7</b>	<b>8.8</b>	<b>12.7</b>	<b>17.0</b>	<b>15.6</b>	<b>12.1</b>	<b>7.4</b>	<b>2.4</b>	<b>-0.9</b>
	Sd	<b>3.91</b>	<b>3.54</b>	<b>4.04</b>	<b>3.79</b>	<b>3.73</b>	<b>3.00</b>	<b>2.30</b>	<b>2.25</b>	<b>3.02</b>	<b>3.49</b>	<b>4.04</b>	<b>4.05</b>	
	HDD10.0	<b>1878</b>	<b>365</b>	<b>308</b>	<b>261</b>	<b>189</b>	<b>68</b>	<b>11</b>	<b>0</b>	<b>1</b>	<b>15</b>	<b>92</b>	<b>228</b>	<b>339</b>
	HDD18.3	<b>4331</b>	<b>623</b>	<b>542</b>	<b>519</b>	<b>438</b>	<b>297</b>	<b>168</b>	<b>54</b>	<b>88</b>	<b>186</b>	<b>341</b>	<b>478</b>	<b>597</b>
	CDD10.0	<b>604</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>30</b>	<b>93</b>	<b>217</b>	<b>174</b>	<b>79</b>	<b>10</b>	<b>0</b>	<b>0</b>
	CDD18.3	<b>15</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
	CDH23.3	<b>1342</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>19</b>	<b>118</b>	<b>631</b>	<b>430</b>	<b>141</b>	<b>3</b>	<b>0</b>	<b>0</b>
	CDH26.7	<b>228</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2</b>	<b>12</b>	<b>134</b>	<b>69</b>	<b>11</b>	<b>0</b>	<b>0</b>	<b>0</b>
(13) Precipitation	PrecAvg	<b>560</b>	<b>99</b>	<b>86</b>	<b>71</b>	<b>38</b>	<b>28</b>	<b>15</b>	<b>10</b>	<b>13</b>	<b>16</b>	<b>31</b>	<b>68</b>	<b>87</b>
	PrecMax	<b>1279</b>	<b>580</b>	<b>326</b>	<b>278</b>	<b>198</b>	<b>76</b>	<b>67</b>	<b>68</b>	<b>65</b>	<b>37</b>	<b>212</b>	<b>210</b>	<b>700</b>
	PrecMin	<b>251</b>	<b>13</b>	<b>11</b>	<b>16</b>	<b>6</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>17</b>	<b>7</b>
	PrecSD	<b>264.6</b>	<b>143.5</b>	<b>93.0</b>	<b>65.8</b>	<b>42.2</b>	<b>18.8</b>	<b>20.2</b>	<b>17.0</b>	<b>18.7</b>	<b>12.1</b>	<b>52.7</b>	<b>65.4</b>	<b>146.1</b>
(17) Monthly Design Dry Bulb and Mean Coincident Wet Bulb Temperatures	0.4%	DB	<b>11.0</b>	<b>12.2</b>	<b>16.5</b>	<b>20.1</b>	<b>26.1</b>	<b>27.9</b>	<b>31.2</b>	<b>30.3</b>	<b>27.8</b>	<b>22.8</b>	<b>17.4</b>	<b>12.7</b>
		MCWB	<b>3.1</b>	<b>4.0</b>	<b>6.7</b>	<b>8.7</b>	<b>11.4</b>	<b>13.0</b>	<b>14.6</b>	<b>13.3</b>	<b>11.8</b>	<b>10.5</b>	<b>8.6</b>	<b>5.1</b>
	2%	DB	<b>8.7</b>	<b>9.1</b>	<b>14.1</b>	<b>17.4</b>	<b>22.7</b>	<b>26.2</b>	<b>29.2</b>	<b>28.3</b>	<b>26.4</b>	<b>20.8</b>	<b>14.1</b>	<b>9.8</b>
		MCWB	<b>2.7</b>	<b>2.8</b>	<b>5.6</b>	<b>7.6</b>	<b>10.5</b>	<b>12.1</b>	<b>14.4</b>	<b>13.0</b>	<b>11.5</b>	<b>9.3</b>	<b>6.3</b>	<b>3.2</b>
	5%	DB	<b>7.2</b>	<b>7.6</b>	<b>12.2</b>	<b>15.1</b>	<b>21.1</b>	<b>24.4</b>	<b>28.0</b>	<b>27.3</b>	<b>25.0</b>	<b>19.0</b>	<b>12.5</b>	<b>7.9</b>
		MCWB	<b>1.8</b>	<b>2.0</b>	<b>4.9</b>	<b>6.1</b>	<b>9.9</b>	<b>11.3</b>	<b>13.6</b>	<b>12.7</b>	<b>11.0</b>	<b>8.4</b>	<b>5.1</b>	<b>2.8</b>
	10%	DB	<b>5.5</b>	<b>6.1</b>	<b>9.8</b>	<b>12.6</b>	<b>18.8</b>	<b>22.9</b>	<b>27.1</b>	<b>26.1</b>	<b>23.2</b>	<b>17.3</b>	<b>10.5</b>	<b>6.2</b>
		MCWB	<b>1.2</b>	<b>1.5</b>	<b>3.3</b>	<b>5.3</b>	<b>9.1</b>	<b>10.8</b>	<b>13.2</b>	<b>12.3</b>	<b>10.5</b>	<b>7.8</b>	<b>4.1</b>	<b>1.9</b>
(25) Monthly Design Wet Bulb and Mean Coincident Dry Bulb Temperatures	0.4%	WB	<b>4.5</b>	<b>5.0</b>	<b>7.9</b>	<b>9.9</b>	<b>12.9</b>	<b>14.7</b>	<b>17.3</b>	<b>15.3</b>	<b>13.8</b>	<b>11.9</b>	<b>9.5</b>	<b>6.7</b>
		MCDB	<b>8.5</b>	<b>10.0</b>	<b>15.1</b>	<b>18.2</b>	<b>21.8</b>	<b>25.1</b>	<b>26.6</b>	<b>25.5</b>	<b>24.2</b>	<b>18.7</b>	<b>15.9</b>	<b>10.2</b>
	2%	WB	<b>3.3</b>	<b>3.8</b>	<b>6.5</b>	<b>8.0</b>	<b>11.5</b>	<b>13.4</b>	<b>16.2</b>	<b>14.5</b>	<b>12.4</b>	<b>10.4</b>	<b>7.3</b>	<b>4.8</b>
		MCDB	<b>7.0</b>	<b>7.9</b>	<b>13.2</b>	<b>16.4</b>	<b>21.1</b>	<b>23.8</b>	<b>25.7</b>	<b>25.2</b>	<b>24.4</b>	<b>18.7</b>	<b>13.1</b>	<b>8.0</b>
	5%	WB	<b>2.5</b>	<b>2.7</b>	<b>5.2</b>	<b>6.7</b>	<b>10.3</b>	<b>12.3</b>	<b>15.2</b>	<b>13.8</b>	<b>11.6</b>	<b>9.2</b>	<b>5.9</b>	<b>3.4</b>
		MCDB	<b>5.9</b>	<b>6.4</b>	<b>11.5</b>	<b>14.3</b>	<b>19.6</b>	<b>22.5</b>	<b>25.8</b>	<b>24.8</b>	<b>23.8</b>	<b>17.5</b>	<b>11.1</b>	<b>6.6</b>
	10%	WB	<b>1.6</b>	<b>1.7</b>	<b>3.9</b>	<b>5.5</b>	<b>9.4</b>	<b>11.5</b>	<b>14.3</b>	<b>13.0</b>	<b>10.7</b>	<b>8.0</b>	<b>4.7</b>	<b>2.4</b>
		MCDB	<b>4.7</b>	<b>5.2</b>	<b>9.0</b>	<b>12.3</b>	<b>18.0</b>	<b>21.6</b>	<b>24.7</b>	<b>24.3</b>	<b>22.6</b>	<b>16.1</b>	<b>9.7</b>	<b>5.6</b>
(33) Mean Daily Temperature Range	5% DB	MDBR	<b>12.7</b>	<b>12.0</b>	<b>13.2</b>	<b>12.8</b>	<b>15.8</b>	<b>18.4</b>	<b>19.9</b>	<b>20.2</b>	<b>20.4</b>	<b>16.7</b>	<b>14.0</b>	<b>12.1</b>
		MCDBR	<b>15.5</b>	<b>15.6</b>	<b>17.2</b>	<b>18.6</b>	<b>20.4</b>	<b>21.6</b>	<b>21.1</b>	<b>22.1</b>	<b>23.7</b>	<b>21.2</b>	<b>17.7</b>	<b>14.7</b>
		MCWBR	<b>10.3</b>	<b>10.0</b>	<b>9.7</b>	<b>9.8</b>	<b>9.7</b>	<b>9.8</b>	<b>9.0</b>	<b>9.8</b>	<b>11.1</b>	<b>11.4</b>	<b>10.8</b>	<b>9.5</b>
	5% WB	MCDWR	<b>13.7</b>	<b>13.4</b>	<b>16.7</b>	<b>18.1</b>	<b>19.8</b>	<b>20.1</b>	<b>19.2</b>	<b>20.2</b>	<b>22.5</b>	<b>19.7</b>	<b>16.5</b>	<b>12.7</b>
		MCWBR	<b>9.6</b>	<b>8.9</b>	<b>9.8</b>	<b>9.8</b>	<b>9.8</b>	<b>9.4</b>	<b>8.5</b>	<b>9.4</b>	<b>10.8</b>	<b>10.9</b>	<b>10.5</b>	<b>8.8</b>
(38) Clear Sky Solar Irradiance	taub		<b>0.268</b>	<b>0.278</b>	<b>0.264</b>	<b>0.255</b>	<b>0.254</b>	<b>0.257</b>	<b>0.262</b>	<b>0.269</b>	<b>0.275</b>	<b>0.289</b>	<b>0.275</b>	<b>0.268</b>
	taud		<b>2.629</b>	<b>2.559</b>	<b>2.635</b>	<b>2.629</b>	<b>2.668</b>	<b>2.661</b>	<b>2.665</b>	<b>2.675</b>	<b>2.722</b>	<b>2.669</b>	<b>2.674</b>	<b>2.618</b>
	Ebn,noon		<b>932</b>	<b>960</b>	<b>1009</b>	<b>1027</b>	<b>1025</b>	<b>1017</b>	<b>1010</b>	<b>999</b>	<b>983</b>	<b>938</b>	<b>917</b>	<b>905</b>
	Edh,noon		<b>68</b>	<b>83</b>	<b>85</b>	<b>91</b>	<b>90</b>	<b>90</b>	<b>89</b>	<b>86</b>	<b>77</b>	<b>74</b>	<b>64</b>	<b>64</b>

Nomenclature:

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