

Table 3.29. Distribution of Peak Watts per Square Foot and Load Factors, 1992

Building Characteristics	All Demand-Metered Buildings			Peak Watts per Square Foot			Load Factor			RSE Row Factor
	Number of Buildings (thousand)	Total Floorspace (million square feet)	Total Electricity Consumed (billion kWh)	25th Percentile	Median	75th Percentile	25th Percentile	Median	75th Percentile	
	0.9	1.0	1.1	NF	NF	NF	NF	NF	NF	
RSE Column Factor:										
All Buildings	2,375	47,412	629	2.32	4.67	8.68	0.159	0.243	0.336	5.39
Building Floorspace (square feet)										
1,001 to 5,000	1,075	3,008	64	3.60	6.50	13.00	0.132	0.220	0.320	7.64
5,001 to 10,000	500	3,720	55	2.16	4.13	7.50	0.160	0.237	0.317	8.06
10,001 to 25,000	411	6,679	81	1.80	3.53	5.76	0.170	0.258	0.336	8.33
25,001 to 50,000	210	7,496	90	1.38	2.68	5.61	0.208	0.273	0.372	9.70
50,001 to 100,000	94	6,583	83	1.76	3.33	5.48	0.226	0.333	0.417	11.94
100,001 to 200,000	58	7,948	89	1.12	2.89	4.80	0.275	0.363	0.472	12.49
200,001 to 500,000	21	6,157	87	1.22	2.55	4.80	0.345	0.430	0.546	14.81
Over 500,000	8	5,822	80	1.97	3.88	4.92	0.318	0.449	0.522	20.89
Principal Building Activity										
Education	213	6,637	56	2.39	4.52	7.97	0.134	0.177	0.242	9.45
Food Sales	90	540	27	7.93	12.25	17.78	0.412	0.514	0.587	18.10
Food Service	195	1,220	34	6.00	11.43	18.75	0.259	0.319	0.371	10.55
Health Care	36	1,486	35	3.13	4.47	8.13	0.166	0.274	0.364	14.47
Lodging	104	2,413	50	2.62	4.90	8.50	0.268	0.333	0.436	17.81
Mercantile and Service	573	7,516	92	2.31	4.25	7.90	0.189	0.253	0.337	8.45
Office	408	9,473	178	3.24	5.19	8.00	0.202	0.258	0.332	9.45
Parking Garage	13	1,496	Q	1.77	5.50	8.89	0.102	0.256	0.394	40.18
Public Assembly	154	3,518	44	2.38	4.47	7.43	0.094	0.163	0.254	12.22
Public Order and Safety	40	534	5	2.15	3.21	8.10	0.205	0.299	0.346	29.55
Religious Worship	103	1,828	5	2.39	4.32	8.00	0.056	0.084	0.123	15.57
Warehouse and Storage	325	8,019	62	1.21	2.57	5.00	0.139	0.215	0.309	15.10
Other	38	793	19	2.07	6.33	11.88	0.121	0.369	0.560	20.02
Vacant	84	1,938	12	1.00	1.88	4.88	0.081	0.167	0.263	18.53
Year Constructed										
1899 or Before	55	906	9	1.00	2.89	7.71	0.167	0.259	0.332	19.93
1900 to 1919	122	2,113	15	1.43	3.33	6.00	0.167	0.233	0.315	18.08
1920 to 1945	292	4,993	45	1.64	3.25	6.21	0.154	0.218	0.293	14.12
1946 to 1959	423	7,217	80	2.33	4.67	8.00	0.147	0.228	0.321	11.30
1960 to 1969	399	8,975	124	2.38	4.52	7.90	0.165	0.254	0.337	9.48
1970 to 1979	537	10,290	153	2.50	5.13	10.63	0.149	0.256	0.347	8.02
1980 to 1989	480	10,929	174	3.25	5.61	10.67	0.190	0.263	0.376	8.90
1990 to 1992	67	1,987	28	2.23	4.64	7.00	0.137	0.210	0.334	16.40
Census Region and Division										
Northeast	469	9,609	94	1.90	3.51	6.50	0.184	0.253	0.329	8.24
New England	114	2,291	24	2.08	3.39	7.19	0.173	0.269	0.363	26.07
Middle Atlantic	354	7,318	71	1.82	3.51	6.33	0.185	0.247	0.324	12.33
Midwest	447	10,889	142	1.98	4.00	7.20	0.177	0.260	0.356	10.81
East North Central	309	7,147	88	1.91	3.90	6.70	0.163	0.247	0.348	15.53
West North Central	138	3,743	53	2.02	4.09	8.63	0.216	0.289	0.372	14.29
South	1,054	18,395	257	2.71	5.00	9.39	0.137	0.225	0.331	9.37
South Atlantic	442	8,646	119	2.44	5.19	10.25	0.131	0.220	0.332	11.76
East South Central	184	3,572	57	2.33	4.90	10.30	0.192	0.260	0.376	27.19
West South Central	428	6,177	81	3.04	5.06	8.40	0.132	0.213	0.312	15.70
West	405	8,518	136	3.20	5.60	11.45	0.163	0.254	0.351	13.08
Mountain	141	2,228	41	3.71	5.83	10.67	0.149	0.247	0.340	21.83
Pacific	264	6,290	95	2.87	5.40	11.61	0.167	0.266	0.351	13.82
Climate Zone: 45-Year Average										
Fewer than 2,000 CDD and --										
More than 7,000 HDD	142	3,458	47	2.00	3.85	8.30	0.172	0.276	0.374	21.19
5,500-7,000 HDD	611	13,401	152	2.00	3.92	6.92	0.177	0.253	0.333	11.22
4,000-5,499 HDD	435	9,594	121	2.29	5.00	9.65	0.167	0.254	0.344	16.00
Fewer than 4,000 HDD	510	10,934	169	2.73	5.31	10.30	0.162	0.255	0.350	15.65
More than 2,000 CDD and --										
Fewer than 4,000 HDD	678	10,025	139	2.71	5.00	9.17	0.137	0.215	0.316	13.63

See footnotes at end of table.

Table 3.29. Distribution of Peak Watts per Square Foot and Load Factors, 1992 (Continued)

Building Characteristics	All Demand-Metered Buildings			Peak Watts per Square Foot			Load Factor			RSE Row Factor
	Number of Buildings (thousand)	Total Floorspace (million square feet)	Total Electricity Consumed (billion kWh)	25th Percentile	Median	75th Percentile	25th Percentile	Median	75th Percentile	
RSE Column Factor:	0.9	1.0	1.1	NF	NF	NF	NF	NF	NF	
Energy Sources (more than one may apply)										
Electricity	2,375	47,412	629	2.32	4.67	8.68	0.159	0.243	0.336	5.39
Natural Gas	1,436	32,198	421	2.33	4.59	8.46	0.176	0.256	0.343	6.47
Fuel Oil	286	10,356	168	1.99	3.25	6.21	0.177	0.265	0.362	12.16
District Heat	72	4,152	68	2.21	3.57	5.92	0.183	0.314	0.482	25.84
District Chilled Water	22	1,702	32	2.71	4.01	8.07	0.177	0.369	0.504	20.62
Propane	151	2,328	33	2.50	5.45	9.14	0.161	0.233	0.318	17.63
Any Other	56	852	8	1.60	3.57	7.46	0.091	0.207	0.293	22.79
Energy End Uses (more than one may apply)										
Heated Buildings	2,204	44,495	600	2.50	4.80	9.02	0.163	0.248	0.338	5.28
Buildings with A/C	1,971	42,117	592	2.75	5.13	9.50	0.169	0.255	0.344	5.39
Buildings with Water Heating	1,929	42,745	597	2.62	5.00	9.34	0.177	0.260	0.351	5.42
Buildings with Cooking	509	17,861	284	3.25	6.22	14.93	0.199	0.312	0.417	6.90
Buildings with Manufacturing	77	2,701	31	2.18	4.31	7.71	0.167	0.247	0.331	14.96
Workers (main shift)										
Less than 5	1,039	8,893	81	2.00	4.62	8.57	0.113	0.198	0.296	9.41
5 to 9	497	4,805	49	2.50	5.16	10.45	0.179	0.236	0.318	7.82
10 to 19	357	5,693	71	2.67	4.94	8.38	0.193	0.265	0.339	12.17
20 to 49	298	8,499	107	2.39	4.48	7.53	0.226	0.289	0.383	9.56
50 to 99	101	6,220	86	2.32	4.33	6.50	0.253	0.330	0.429	11.08
100 or More	84	13,302	235	2.79	4.80	7.07	0.334	0.402	0.525	10.05
Weekly Operating Hours										
39 or Fewer	301	3,520	17	1.75	3.56	7.25	0.070	0.107	0.206	10.98
40 to 48	674	10,503	112	2.17	4.17	7.27	0.150	0.215	0.274	9.61
49 to 60	473	9,442	102	2.21	4.38	7.03	0.167	0.234	0.302	7.02
61 to 84	380	9,112	117	3.08	5.39	10.48	0.204	0.269	0.354	10.13
85 to 167	315	6,195	102	3.32	7.00	15.56	0.267	0.352	0.468	9.72
Open Continuously	231	8,640	179	2.38	5.00	11.00	0.272	0.356	0.500	10.06
Ownership and Occupancy										
Nongovernment Owned	1,975	35,972	499	2.33	4.83	8.96	0.160	0.248	0.338	5.76
Owner Occupied	1,539	26,674	392	2.50	5.00	9.52	0.162	0.254	0.344	5.79
Single Establishment	1,383	20,431	313	2.59	5.16	10.00	0.160	0.253	0.348	6.58
Multiple Establishment	155	6,243	79	2.00	4.17	7.27	0.193	0.259	0.327	13.14
Nonowner Occupied	393	8,556	104	2.20	4.33	8.00	0.174	0.247	0.333	10.71
Single Establishment	249	4,135	55	2.50	5.19	8.89	0.150	0.238	0.333	13.86
Multiple Establishment	144	4,421	49	1.89	3.33	6.08	0.202	0.267	0.330	15.49
Vacant	43	741	Q	0.67	2.00	5.50	0.069	0.101	0.152	26.26
Government Owned	401	11,440	130	2.27	3.98	7.14	0.152	0.220	0.320	7.90
Space-Heating Energy Source										
Electricity	879	18,925	286	3.20	5.71	11.27	0.163	0.254	0.351	7.18
Electricity Main	642	11,546	196	3.88	6.67	13.27	0.167	0.255	0.362	8.11
Electricity Secondary	237	7,378	91	2.18	4.08	6.70	0.155	0.237	0.332	12.88
Other Excluding Electricity	1,325	25,571	314	2.20	4.17	8.00	0.163	0.245	0.333	6.66
Building Not Heated	171	2,916	29	0.69	2.25	5.83	0.104	0.196	0.302	26.74
Main Space-Heating Energy Source										
Electricity	642	11,546	196	3.88	6.67	13.27	0.167	0.255	0.362	8.11
Natural Gas	1,188	24,950	305	2.29	4.33	8.00	0.167	0.249	0.333	7.61
Fuel Oil	182	3,016	26	1.90	3.20	5.59	0.147	0.234	0.314	18.93
District Heat	67	3,836	62	2.18	3.53	5.50	0.183	0.314	0.473	17.67
Propane	85	594	6	2.86	5.56	10.00	0.129	0.210	0.244	24.25
Wood	21	99	1	1.63	3.33	9.60	0.091	0.272	0.319	31.91
Any Other	Q	320	2	1.00	2.64	3.57	0.106	0.162	0.260	38.42

See footnotes at end of table.

Table 3.29. Distribution of Peak Watts per Square Foot and Load Factors, 1992 (Continued)

Building Characteristics	All Demand-Metered Buildings			Peak Watts per Square Foot			Load Factor			RSE Row Factor
	Number of Buildings (thousand)	Total Floorspace (million square feet)	Total Electricity Consumed (billion kWh)	25th Percentile	Median	75th Percentile	25th Percentile	Median	75th Percentile	
RSE Column Factor:	0.9	1.0	1.1	NF	NF	NF	NF	NF	NF	
Replacement Energy Source for Main Heating										
Electricity Only	165	1,621	16	2.37	4.52	8.40	0.149	0.232	0.303	13.52
Natural Gas Only	109	1,401	17	2.00	4.32	10.18	0.178	0.257	0.337	18.99
Fuel Oil Only	91	3,946	65	1.67	3.33	7.90	0.201	0.265	0.352	15.79
Propane Only	105	1,614	18	2.31	4.40	7.50	0.135	0.224	0.330	17.54
Any Other Single Energy Source	16	344	3	1.99	4.00	4.55	0.163	0.282	0.396	40.81
More than One Energy Source	47	596	7	2.17	4.17	8.13	0.149	0.245	0.319	24.80
No Replacement Energy Source	1,671	34,973	474	2.67	5.00	9.37	0.167	0.249	0.340	5.99
Building Not Heated	171	2,916	29	0.69	2.25	5.83	0.104	0.196	0.302	26.74
Cooling Energy Source										
Electricity	1,914	40,313	562	2.75	5.19	9.54	0.168	0.254	0.343	5.41
Other Excluding Electricity	57	1,804	30	2.87	4.33	6.13	0.195	0.263	0.388	19.32
A/C Not Performed	404	5,295	37	1.11	2.50	5.17	0.110	0.199	0.292	16.52
Water-Heating Energy Source										
Electricity	915	18,572	269	2.92	5.50	10.49	0.165	0.248	0.344	6.82
Other Excluding Electricity	1,013	24,173	329	2.45	4.56	8.57	0.190	0.266	0.354	7.11
Water Heating Not Performed	447	4,667	32	1.36	3.33	6.52	0.104	0.183	0.258	18.35
Cooking Energy Source										
Electricity	250	9,780	164	3.53	6.44	15.42	0.171	0.314	0.433	8.60
Other Excluding Electricity	258	8,081	120	3.04	5.92	14.05	0.217	0.309	0.400	9.86
Cooking Not Performed	1,866	29,550	345	2.16	4.32	7.60	0.150	0.232	0.317	6.37
Percent of Floorspace Heated										
Not Heated	171	2,916	29	1.90	4.28	5.78	0.160	0.237	0.309	26.74
1 to 50	330	7,488	53	2.30	5.52	11.08	0.220	0.275	0.377	13.29
51 to 99	323	7,411	103	2.33	4.69	8.70	0.156	0.243	0.336	9.62
100	1,550	29,596	444	0.69	2.25	5.83	0.104	0.196	0.302	5.91
Percent of Floorspace Cooled										
Not Cooled	404	5,295	37	1.46	2.92	5.52	0.140	0.222	0.299	16.52
1 to 50	632	15,200	107	2.88	4.94	9.58	0.192	0.264	0.376	7.05
51 to 99	375	10,193	175	2.81	5.24	9.93	0.163	0.250	0.339	9.18
100	964	16,724	310	1.11	2.50	5.17	0.110	0.199	0.292	6.97
Percent Lit when Open										
Not Lit	60	776	3	1.78	2.99	5.56	0.167	0.244	0.313	30.56
1 to 50	376	5,901	37	3.27	5.22	9.16	0.196	0.283	0.400	14.57
51 to 99	443	10,641	131	4.00	6.67	12.67	0.161	0.248	0.348	6.61
100	1,496	30,093	458	0.69	2.00	4.21	0.073	0.094	0.203	6.34
Percent Lit when Closed										
Not Lit	1,322	23,145	310	1.43	3.13	5.45	0.121	0.196	0.283	6.76
1 to 50	990	22,934	297	2.39	4.55	8.38	0.192	0.259	0.336	6.76
51 to 99	23	790	13	2.75	5.37	10.00	0.167	0.255	0.354	29.75
100	40	543	9	2.13	4.44	8.38	0.130	0.216	0.319	27.36
Lighting Equipment (more than one may apply)										
Incandescent	1,265	27,508	389	2.65	5.00	9.33	0.198	0.265	0.356	5.56
Standard Fluorescent	2,193	44,880	601	3.62	7.40	11.66	0.264	0.419	0.525	5.24
Compact Fluorescent	132	6,173	110	3.88	5.64	8.78	0.267	0.340	0.452	11.35
High-Intensity Discharge	244	14,369	183	2.50	5.00	9.09	0.161	0.249	0.340	9.13
Other	39	1,060	16	2.44	4.75	8.95	0.165	0.248	0.339	28.86

See footnotes at end of table.

Table 3.29. Distribution of Peak Watts per Square Foot and Load Factors, 1992 (Continued)

Building Characteristics	All Demand-Metered Buildings			Peak Watts per Square Foot			Load Factor			RSE Row Factor
	Number of Buildings (thousand)	Total Floorspace (million square feet)	Total Electricity Consumed (billion kWh)	25th Percentile	Median	75th Percentile	25th Percentile	Median	75th Percentile	
RSE Column Factor:	0.9	1.0	1.1	NF	NF	NF	NF	NF	NF	
Commercial Refrigeration Equipment (more than one may apply)										
Any Equipment	634	19,429	326	2.33	5.22	7.20	0.196	0.287	0.388	6.22
Walk-in Units	431	14,850	267	1.97	3.60	6.50	0.211	0.286	0.384	6.97
Cases and Cabinets	513	15,822	275	3.75	5.48	9.78	0.154	0.263	0.360	6.55
None	1,741	27,982	303	3.53	6.96	15.00	0.232	0.332	0.442	6.92
Personal Computers and/or Computer Terminals										
1 to 4	625	8,439	94	3.85	8.97	17.01	0.264	0.354	0.482	7.44
5 to 9	224	4,438	59	3.88	7.50	15.56	0.255	0.348	0.468	11.09
10 to 19	153	4,735	60	2.05	4.17	7.24	0.140	0.221	0.298	11.75
20 to 49	130	6,405	75	2.50	4.71	9.75	0.171	0.248	0.331	10.79
50 or More	96	12,112	223	2.68	4.29	7.22	0.222	0.280	0.355	10.33
Annual Consumption (kilowatthours)										
10,000 or Less	265	1,156	2	2.17	4.29	6.67	0.202	0.272	0.369	14.69
10,001 to 50,000	834	6,210	22	2.75	4.53	6.70	0.188	0.287	0.384	8.33
50,001 to 100,000	404	4,398	29	2.80	4.80	7.25	0.290	0.380	0.477	8.94
100,001 to 500,000	646	12,316	141	0.80	1.89	3.57	0.071	0.103	0.195	5.51
500,001 to 1,000,000	103	5,559	70	2.00	3.88	6.90	0.132	0.202	0.254	12.12
1,000,001 to 5,000,000	108	11,274	208	2.71	5.33	9.50	0.184	0.257	0.330	10.20
Over 5,000,000	15	6,498	157	3.59	6.50	13.91	0.246	0.314	0.428	14.31
Peak Electricity Demand (kilowatts)										
10 or Less	434	2,330	6	3.48	6.14	10.90	0.297	0.372	0.474	13.94
11 to 25	635	4,410	23	4.11	6.47	12.64	0.339	0.420	0.549	8.19
26 to 50	500	4,994	45	4.40	5.24	9.23	0.405	0.499	0.590	6.90
51 to 100	389	6,929	74	0.88	1.88	3.33	0.113	0.203	0.268	7.88
101 to 250	246	8,410	103	2.35	4.25	7.14	0.149	0.223	0.291	8.24
251 to 1,000	141	12,155	198	3.24	6.00	11.60	0.178	0.262	0.350	9.72
Over 1,000	30	8,184	181	3.41	6.27	13.15	0.167	0.269	0.363	14.63
Season of Peak Electricity Demand										
Summer	1,342	29,289	414	3.72	6.46	12.67	0.206	0.302	0.384	7.10
Winter	854	15,679	187	4.18	6.73	15.71	0.225	0.359	0.471	8.64
Summer and Winter	179	2,444	28	5.00	11.18	50.72	0.056	0.344	0.481	13.29
Building Generates Electricity										
Yes	109	8,618	164	2.53	5.00	8.89	0.176	0.260	0.352	9.68
No	2,266	38,794	465	2.24	4.47	8.73	0.137	0.219	0.310	5.77

NF = No applicable RSE column factor.

Q = Data withheld because the Relative Standard Error (RSE) was greater than 50 percent, or data were reported for fewer than 20 buildings.

Notes: • To obtain the RSE percentage for any table cell, multiply the corresponding RSE column and RSE row factors. • See Glossary for explanation of abbreviations and definitions of terms used in this report. • Statistics for the "energy end uses" represent consumption in buildings that have end use, not consumption for a particular fuel for a particular end use. • A/C = Air Conditioning. • Because of rounding, data may not sum to totals.

Source: Energy Information Administration, Office of Energy Markets and End Use, Forms EIA-871A through F of the 1992 Commercial Buildings Energy Consumption Survey.