

阿熙提与坎德拉每平方米的
相互换算表

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(083.4)

GB 5114—85

Apostilb and candela per square metre conversion tables

1 引言

1.1 为了使所有的国家标准逐步采用国际单位制，针对我国现有的实际情况和各行各业的需要，参照有关量和单位的 15 个国家标准 (GB 3100—82, GB 3101—82, GB 3102.1~3102.13—82)，遵照 GB 1.1—81《标准化工作导则 编写标准的一般规定》，特编制 GB 5114—85《阿熙提与坎德拉每平方米的相互换算表》。

1.2 本标准是光亮度单位阿熙提 (asb) 与坎德拉每平方米 (cd/m²) 的相互换算表，它适用于所有阿熙提换算成坎德拉每平方米和坎德拉每平方米换算成阿熙提的场合。本标准的换算表仅限于一般需要的换算。换算表中换算后的数字均修约至五位有效数字，1 以下的数字修约至小数点后四位。当要求相对不确定度小于万分之五时，则应按所给的换算系数进行计算和修约。修约规则按 GB 1.1—81 附录 C 的规定。

1.3 换算系数

$1\text{ asb}=\pi^{-1}\text{ cd/m}^2$

$1\text{ cd/m}^2=\pi\text{ asb}$

此数据取自“国际电工辞典”第 45 组—照明。

1.4 本标准在附录 A (参考件) 中给出了常用光辐射量的单位换算系数。这些光辐射量包括波长、辐射能、辐射功率、辐射照度、发光强度、光亮度、光照度、光量、曝光量等。

2 换算表

表 1 阿熙提至坎德拉每平方米的换算表
 $1\text{ asb}=\pi^{-1}\text{ cd/m}^2$

cd/m ² \ asb											
	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	
asb	0	0.0000	0.0318	0.0637	0.0955	0.1273	0.1592	0.1910	0.2228	0.2546	0.2865
	1	0.3183	0.3501	0.3820	0.4138	0.4456	0.4775	0.5093	0.5411	0.5730	0.6048
	2	0.6366	0.6685	0.7003	0.7321	0.7639	0.7958	0.8276	0.8594	0.8913	0.9231
	3	0.9549	0.9868	1.0186	1.0504	1.0823	1.1141	1.1459	1.1777	1.2096	1.2414
	4	1.2732	1.3051	1.3369	1.3687	1.4006	1.4324	1.4642	1.4961	1.5279	1.5597
	5	1.5915	1.6234	1.6552	1.6870	1.7189	1.7507	1.7825	1.8144	1.8462	1.8780
	6	1.9099	1.9417	1.9735	2.0054	2.0372	2.0690	2.1008	2.1327	2.1645	2.1963
	7	2.2282	2.2600	2.2918	2.3237	2.3555	2.3873	2.4192	2.4510	2.4828	2.5146
	8	2.5465	2.5783	2.6101	2.6420	2.6738	2.7056	2.7375	2.7693	2.8011	2.8330
	9	2.8648	2.8966	2.9285	2.9603	2.9921	3.0239	3.0558	3.0876	3.1194	3.1513

续表 1

cd/m ² asb	asb									
	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
10	3.1831	3.2149	3.2468	3.2786	3.3104	3.3423	3.3741	3.4059	3.4377	3.4696
11	3.5014	3.5332	3.5651	3.5969	3.6287	3.6606	3.6924	3.7242	3.7561	3.7879
12	3.8197	3.8515	3.8834	3.9152	3.9470	3.9789	4.0107	4.0425	4.0744	4.1062
13	4.1380	4.1699	4.2017	4.2335	4.2654	4.2972	4.3290	4.3608	4.3927	4.4245
14	4.4563	4.4882	4.5200	4.5518	4.5837	4.6155	4.6473	4.6792	4.7110	4.7428
15	4.7746	4.8065	4.8383	4.8701	4.9020	4.9338	4.9656	4.9975	5.0293	5.0611
16	5.0930	5.1248	5.1566	5.1885	5.2203	5.2521	5.2839	5.3158	5.3476	5.3794
17	5.4113	5.4431	5.4749	5.5068	5.5386	5.5704	5.6023	5.6341	5.6659	5.6977
18	5.7296	5.7614	5.7932	5.8251	5.8569	5.8887	5.9206	5.9524	5.9842	6.0161
19	6.0479	6.0797	6.1115	6.1434	6.1752	6.2070	6.2389	6.2707	6.3025	6.3344
20	6.3662	6.3980	6.4299	6.4617	6.4935	6.5254	6.5572	6.5890	6.6208	6.6527
21	6.6845	6.7163	6.7482	6.7800	6.8118	6.8437	6.8755	6.9073	6.9392	6.9710
22	7.0028	7.0346	7.0665	7.0983	7.1301	7.1620	7.1938	7.2256	7.2575	7.2893
23	7.3211	7.3530	7.3848	7.4166	7.4485	7.4803	7.5121	7.5439	7.5758	7.6076
24	7.6394	7.6713	7.7031	7.7349	7.7668	7.7986	7.8304	7.8623	7.8941	7.9259
25	7.9577	7.9896	8.0214	8.0532	8.0851	8.1169	8.1487	8.1806	8.2124	8.2442
26	8.2761	8.3079	8.3397	8.3715	8.4034	8.4352	8.4670	8.4989	8.5307	8.5625
27	8.5944	8.6262	8.6580	8.6899	8.7217	8.7535	8.7854	8.8172	8.8490	8.8808
28	8.9127	8.9445	8.9763	9.0082	9.0400	9.0718	9.1037	9.1355	9.1673	9.1992
29	9.2310	9.2628	9.2946	9.3265	9.3583	9.3901	9.4220	9.4538	9.4856	9.5175
30	9.5493	9.5811	9.6130	9.6448	9.6766	9.7085	9.7403	9.7721	9.8039	9.8358
31	9.8676	9.8994	9.9313	9.9631	9.9949	10.027	10.059	10.090	10.122	10.154
32	10.186	10.218	10.250	10.281	10.313	10.345	10.377	10.409	10.441	10.472
33	10.504	10.536	10.568	10.600	10.632	10.663	10.695	10.727	10.759	10.791
34	10.823	10.854	10.886	10.918	10.950	10.982	11.014	11.045	11.077	11.109
35	11.141	11.173	11.205	11.236	11.268	11.300	11.332	11.364	11.395	11.427
36	11.459	11.491	11.523	11.555	11.586	11.618	11.650	11.682	11.714	11.746
37	11.777	11.809	11.841	11.873	11.905	11.937	11.968	12.000	12.032	12.064
38	12.096	12.128	12.159	12.191	12.223	12.255	12.287	12.319	12.350	12.382
39	12.414	12.446	12.478	12.510	12.541	12.573	12.605	12.637	12.669	12.701
40	12.732	12.764	12.796	12.828	12.860	12.892	12.923	12.955	12.987	13.019
41	13.051	13.083	13.114	13.146	13.178	13.210	13.242	13.274	13.305	13.337
42	13.369	13.401	13.433	13.465	13.496	13.528	13.560	13.592	13.624	13.655
43	13.687	13.719	13.751	13.783	13.815	13.846	13.878	13.910	13.942	13.974
44	14.006	14.037	14.069	14.101	14.133	14.165	14.197	14.228	14.260	14.292
45	14.324	14.356	14.388	14.419	14.451	14.483	14.515	14.547	14.579	14.610
46	14.642	14.674	14.706	14.738	14.770	14.801	14.833	14.865	14.897	14.929
47	14.961	14.992	15.024	15.056	15.088	15.120	15.152	15.183	15.215	15.247
48	15.279	15.311	15.343	15.374	15.406	15.438	15.470	15.502	15.534	15.565
49	15.597	15.629	15.661	15.693	15.725	15.756	15.788	15.820	15.852	15.884

续表 1

cd/m ² asb	asb									
	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
50	15.915	15.947	15.979	16.011	16.043	16.075	16.106	16.138	16.170	16.202
51	16.234	16.266	16.297	16.329	16.361	16.393	16.425	16.457	16.488	16.520
52	16.522	16.584	16.616	16.648	16.679	16.711	16.743	16.775	16.807	16.839
53	16.870	16.902	16.934	16.966	16.998	17.030	17.061	17.093	17.125	17.157
54	17.189	17.221	17.252	17.284	17.316	17.348	17.380	17.412	17.443	17.475
55	17.507	17.539	17.571	17.603	17.634	17.666	17.698	17.730	17.762	17.794
56	17.825	17.857	17.889	17.921	17.953	17.985	18.016	18.048	18.080	18.112
57	18.144	18.175	18.207	18.239	18.271	18.303	18.335	18.366	18.398	18.430
58	18.462	18.494	18.526	18.557	18.589	18.621	18.653	18.685	18.717	18.748
59	18.780	18.812	18.844	18.876	18.908	18.939	18.971	19.003	19.035	19.067
60	19.099	19.130	19.162	19.194	19.226	19.258	19.290	19.321	19.353	19.385
61	19.417	19.449	19.481	19.512	19.544	19.576	19.608	19.640	19.672	19.703
62	19.735	19.767	19.799	19.831	19.863	19.894	19.926	19.958	19.990	20.022
63	20.054	20.085	20.117	20.149	20.181	20.213	20.245	20.276	20.308	20.340
64	20.372	20.404	20.435	20.467	20.499	20.531	20.563	20.595	20.626	20.658
65	20.690	20.722	20.754	20.786	20.817	20.849	20.881	20.913	20.945	20.977
66	21.008	21.040	21.072	21.104	21.136	21.168	21.199	21.231	21.263	21.295
67	21.327	21.359	21.390	21.422	21.454	21.486	21.518	21.550	21.581	21.613
68	21.645	21.677	21.709	21.741	21.772	21.804	21.836	21.868	21.900	21.932
69	21.963	21.995	22.027	22.059	22.091	22.123	22.154	22.186	22.218	22.250
70	22.282	22.314	22.345	22.377	22.409	22.441	22.473	22.505	22.536	22.568
71	22.600	22.632	22.664	22.695	22.727	22.759	22.791	22.823	22.855	22.886
72	22.918	22.950	22.982	23.014	23.046	23.077	23.109	23.141	23.173	23.205
73	23.237	23.268	23.300	23.332	23.364	23.396	23.428	23.459	23.491	23.523
74	23.555	23.587	23.619	23.650	23.682	23.714	23.746	23.778	23.810	23.841
75	23.873	23.905	23.937	23.969	24.001	24.032	24.064	24.096	24.128	24.160
76	24.192	24.223	24.255	24.287	24.319	24.351	24.383	24.414	24.446	24.478
77	24.510	24.542	24.574	24.605	24.637	24.669	24.701	24.733	24.765	24.796
78	24.828	24.860	24.892	24.924	24.955	24.987	25.019	25.051	25.083	25.115
79	25.146	25.178	25.210	25.242	25.274	25.306	25.337	25.369	25.401	25.433
80	25.465	25.497	25.528	25.560	25.592	25.624	25.656	25.688	25.719	25.751
81	25.783	25.815	25.847	25.879	25.910	25.942	25.974	26.006	26.038	26.070
82	26.101	26.133	26.165	26.197	26.229	26.261	26.292	26.324	26.356	26.388
83	26.420	26.452	26.483	26.515	26.547	26.579	26.611	26.643	26.674	26.706
84	26.738	26.770	26.802	26.834	26.865	26.897	26.929	26.961	26.993	27.025
85	27.056	27.088	27.120	27.152	27.184	27.215	27.247	27.279	27.311	27.343
86	27.375	27.406	27.438	27.470	27.502	27.534	27.566	27.597	27.629	27.661
87	27.693	27.725	27.757	27.788	27.820	27.852	27.884	27.916	27.948	27.979
88	28.011	28.043	28.075	28.107	28.139	28.170	28.202	28.234	28.266	28.298
89	28.330	28.361	28.393	28.425	28.457	28.489	28.521	28.552	28.584	28.616

续表 1

$\begin{matrix} \text{cd/m}^2 \\ \text{asb} \end{matrix}$	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
90	28.648	28.680	28.712	28.743	28.775	28.807	28.839	28.871	28.903	28.934
91	28.968	28.998	29.030	29.062	29.094	29.125	29.157	29.189	29.221	29.253
92	29.285	29.316	29.348	29.380	29.412	29.444	29.475	29.507	29.539	29.571
93	29.603	29.635	29.666	29.698	29.730	29.762	29.794	29.826	29.857	29.889
94	29.921	29.953	29.985	30.017	30.048	30.080	30.112	30.144	30.176	30.208
95	30.239	30.271	30.303	30.335	30.367	30.399	30.430	30.462	30.494	30.526
96	30.558	30.590	30.621	30.653	30.685	30.717	30.749	30.781	30.812	30.844
97	30.876	30.908	30.940	30.972	31.003	31.035	31.067	31.099	31.131	31.165
98	31.194	31.226	31.258	31.290	31.322	31.354	31.385	31.417	31.449	31.481
99	31.513	31.545	31.576	31.608	31.640	31.672	31.704	31.735	31.767	31.799
100	31.831	31.863	31.895	31.926	31.958	31.990	32.022	32.054	32.086	32.117

表 2 坎德拉每平方米至阿熙提的换算表

$$1 \text{ cd/m}^2 = \pi \text{ asb}$$

$\begin{matrix} \text{cd/m}^2 \\ \text{asb} \end{matrix}$	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
0	0.0000	0.3142	0.6283	0.9425	1.2566	1.5708	1.8850	2.1991	2.5133	2.8274
1	3.1416	3.4558	3.7699	4.0841	4.3982	4.7124	5.0265	5.3407	5.6549	5.9690
2	6.2832	6.5973	6.9115	7.2257	7.5398	7.8540	8.168	8.4823	8.7965	9.1106
3	9.4248	9.7389	10.053	10.367	10.681	10.996	11.310	11.624	11.938	12.252
4	12.566	12.881	13.195	13.509	13.823	14.137	14.451	14.765	15.080	15.394
5	15.708	16.022	16.336	16.650	16.965	17.279	17.593	17.907	18.221	18.535
6	18.850	19.164	19.478	19.792	20.106	20.420	20.735	21.049	21.363	21.677
7	21.991	22.305	22.619	22.934	23.248	23.562	23.876	24.190	24.504	24.819
8	25.133	25.447	25.761	26.075	26.389	26.704	27.018	27.332	27.646	27.960
9	28.274	28.588	28.903	29.217	29.531	29.845	30.159	30.473	30.788	31.102
10	31.416	31.730	32.044	32.358	32.673	32.987	33.301	33.615	33.929	34.243
11	34.558	34.872	35.186	35.500	35.814	36.128	36.442	36.757	37.071	37.385
12	37.699	38.013	38.327	38.642	38.956	39.270	39.584	39.898	40.212	40.527
13	40.841	41.155	41.469	41.783	42.097	42.412	42.726	43.040	43.354	43.668
14	43.982	44.296	44.611	44.925	45.239	45.553	45.867	46.181	46.496	46.810
15	47.124	47.438	47.752	48.066	48.381	48.695	49.009	49.323	49.637	49.951
16	50.265	50.580	50.894	51.208	51.522	51.836	52.150	52.465	52.779	53.093
17	53.407	53.721	54.035	54.350	54.664	54.978	55.292	55.606	55.920	56.235
18	56.549	56.863	57.177	57.491	57.805	58.119	58.434	58.748	59.062	59.376
19	59.690	60.004	60.319	60.633	60.947	61.261	61.575	61.889	62.204	62.518

续表 2

asb cd/m ²	cd/m ²									
	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
20	62.832	63.146	63.460	63.774	64.088	64.403	64.717	65.031	65.345	65.659
21	65.973	66.288	66.602	66.916	67.230	67.544	67.858	68.173	68.487	68.801
22	69.115	69.429	69.743	70.058	70.372	70.686	71.000	71.314	71.628	71.942
23	72.257	72.571	72.885	73.199	73.513	73.827	74.142	74.456	74.770	75.084
24	75.398	75.712	76.027	76.341	76.655	76.969	77.283	77.597	77.911	78.226
25	78.540	78.854	79.168	79.482	79.796	80.111	80.425	80.739	81.053	81.367
26	81.681	81.996	82.310	82.624	82.938	83.252	83.566	83.881	84.195	84.509
27	84.823	85.137	85.451	85.765	86.080	86.394	86.708	87.022	87.336	87.650
28	87.965	88.279	88.593	88.907	89.221	89.535	89.850	90.164	90.478	90.792
29	91.106	91.420	91.735	92.049	92.363	92.677	92.991	93.305	93.619	93.934
30	94.248	94.562	94.876	95.190	95.504	95.819	96.133	96.447	96.761	97.075
31	97.389	97.704	98.018	98.332	98.646	98.960	99.274	99.588	99.903	100.22
32	100.53	100.85	101.16	101.47	101.79	102.10	102.42	102.73	103.04	103.36
33	103.67	103.99	104.30	104.62	104.93	105.24	105.56	105.87	106.19	106.50
34	106.81	107.13	107.44	107.76	108.07	108.38	108.70	109.01	109.33	109.64
35	109.96	110.27	110.58	110.90	111.21	111.53	111.84	112.15	112.47	112.78
36	113.10	113.41	113.73	114.04	114.35	114.67	114.98	115.30	115.61	115.92
37	116.24	116.55	116.87	117.18	117.50	117.81	118.12	118.44	118.75	119.07
38	119.38	119.69	120.01	120.32	120.64	120.95	121.27	121.58	121.89	122.21
39	122.52	122.84	123.15	123.46	123.78	124.09	124.41	124.72	125.04	125.35
40	125.66	125.98	126.29	126.61	126.92	127.23	127.55	127.86	128.18	128.49
41	128.81	129.12	129.43	129.75	130.06	130.38	130.69	131.00	131.32	131.63
42	131.95	132.26	132.58	132.89	133.20	133.52	133.83	134.15	134.46	134.77
43	135.09	135.40	135.72	136.03	136.35	136.66	136.97	137.29	137.60	137.92
44	138.23	138.54	138.86	139.17	139.49	139.80	140.12	140.43	140.74	141.06
45	141.37	141.69	142.00	142.31	142.63	142.94	143.26	143.57	143.88	144.20
46	144.51	144.83	145.14	145.46	145.77	146.08	146.40	146.71	147.03	147.34
47	147.65	147.97	148.28	148.60	148.91	149.23	149.54	149.85	150.17	150.48
48	150.80	151.11	151.42	151.74	152.05	152.37	152.68	153.00	153.31	153.62
49	153.94	154.25	154.57	154.88	155.19	155.51	155.82	156.14	156.45	156.77
50	157.08	157.39	157.71	158.02	158.34	158.65	158.96	159.28	159.59	159.91
51	160.22	160.54	160.85	161.16	161.48	161.79	162.11	162.42	162.73	163.05
52	163.36	163.68	163.99	164.31	164.62	164.93	165.25	165.56	165.88	166.19
53	166.50	166.82	167.13	167.45	167.76	168.08	168.39	168.70	169.02	169.33
54	169.65	169.96	170.27	170.59	170.90	171.22	171.53	171.85	172.16	172.47
55	172.79	173.10	173.42	173.73	174.04	174.36	174.67	174.99	175.30	175.62
56	175.93	176.24	176.56	176.87	177.19	177.50	177.81	178.13	178.44	178.76
57	179.07	179.38	179.70	180.01	180.33	180.64	180.96	181.27	181.58	181.90
58	182.21	182.53	182.84	183.15	183.47	183.78	184.10	184.41	184.73	185.04
59	185.35	185.67	185.98	186.30	186.61	186.92	187.24	187.55	187.87	188.18

续表 2

asb cd/m ²	cd/m ²	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9
60		188.50	188.81	189.12	189.44	189.75	190.07	190.38	190.69	191.01	191.32
61		191.64	191.95	192.27	192.58	192.89	193.21	193.52	193.84	194.15	194.46
62		194.78	195.09	195.41	195.72	195.04	196.35	196.66	196.98	197.29	197.61
63		197.92	198.23	198.55	198.86	199.18	199.49	199.81	200.12	200.43	200.75
64		201.06	201.38	201.69	202.00	202.32	202.63	202.95	203.26	203.58	203.89
65		204.20	204.52	204.83	205.15	205.46	205.77	206.09	206.40	206.72	207.03
66		207.35	207.66	207.97	208.29	208.60	208.92	209.23	209.54	209.86	210.17
67		210.49	210.80	211.12	211.43	211.74	212.06	212.37	212.69	213.00	213.31
68		213.63	213.94	214.26	214.57	214.88	215.20	215.51	215.83	216.14	216.46
69		216.77	217.08	217.40	217.71	218.03	218.34	218.65	218.97	219.28	219.60
70		219.91	220.23	220.54	220.85	221.17	221.48	221.80	222.11	222.42	222.74
71		223.05	223.37	223.68	224.00	224.31	224.62	224.94	225.25	225.57	225.88
72		226.19	226.51	226.82	227.14	227.45	227.77	228.08	228.39	228.71	229.02
73		229.34	229.65	229.96	230.28	230.59	230.91	231.22	231.54	231.85	232.16
74		232.48	232.79	233.11	233.42	233.73	234.05	234.36	234.68	234.99	235.31
75		235.62	235.93	236.25	236.56	236.88	237.19	237.50	237.82	238.13	238.45
76		238.76	239.08	239.39	239.70	240.02	240.33	240.65	240.96	241.27	241.59
77		241.90	242.22	242.53	242.85	243.16	243.47	243.79	244.10	244.42	244.73
78		245.04	245.36	245.67	245.99	246.30	246.62	246.93	247.24	247.56	247.87
79		248.19	248.50	248.81	249.13	249.44	249.76	250.07	250.38	250.70	251.01
80		251.33	251.64	251.96	252.27	252.58	252.90	253.21	253.53	253.84	254.15
81		254.47	254.78	255.10	255.41	255.73	256.04	256.35	256.67	256.98	257.30
82		257.61	257.92	258.24	258.55	258.87	259.18	259.50	259.81	260.12	260.44
83		260.75	261.07	261.38	261.69	262.01	262.32	262.64	262.95	263.27	263.58
84		263.89	264.21	264.52	264.84	265.15	265.46	265.78	266.09	266.41	266.72
85		267.04	267.35	267.66	267.98	268.29	268.61	268.92	269.23	269.55	269.86
86		270.18	270.49	270.81	271.12	271.43	271.75	272.06	272.38	272.69	273.00
87		273.32	273.63	273.95	274.26	274.58	274.89	275.20	275.52	275.83	276.15
88		276.46	276.77	277.09	277.40	277.72	278.03	278.35	278.66	278.97	279.29
89		279.60	279.92	280.23	280.54	280.86	281.17	281.49	281.80	282.12	282.43
90		282.74	283.06	283.37	283.69	284.00	284.31	284.63	284.94	285.26	285.57
91		285.88	286.20	286.51	286.83	287.14	287.46	287.77	288.08	288.40	288.71
92		289.03	289.34	289.65	289.97	290.28	290.60	290.91	291.23	291.54	291.85
93		292.17	292.48	292.80	293.11	293.42	293.74	294.05	294.37	294.68	295.00
94		295.31	295.62	295.94	296.25	296.57	296.88	297.19	297.51	297.82	298.14
95		298.45	298.77	299.08	299.39	299.71	300.02	300.34	300.65	300.96	301.28
96		301.59	301.91	302.22	302.54	302.85	303.16	303.48	303.79	304.11	304.42
97		304.73	305.05	305.36	305.68	305.99	306.31	306.62	306.93	307.25	307.56
98		307.88	308.19	308.50	308.82	309.13	309.45	309.76	310.08	310.39	310.70
99		311.02	311.33	311.65	311.96	312.27	312.59	312.90	313.22	313.53	313.85
100		314.16	314.47	314.79	315.10	315.42	315.73	316.04	316.36	316.67	316.99

附 录 A
常用光辐射量单位的换算系数表*
(参考件)

量名称	单位名称	单位符号	与 SI 单位的换算系数	备 注
波长	埃	Å	1 Å=10 ⁻¹⁰ m(准确值)	
辐射能	卡	cal	1 cal=4.186 8 J (准确值)	系指国际蒸汽表卡(下同)
	瓦小时	W·h	1 W·h=3600 J (准确值)	
	电子伏特	eV	1 eV=1.6021892×10 ⁻¹⁹ J	
	尔 格	erg	1 erg=10 ⁻⁷ J (准确值)	
辐射功率	卡每秒	cal/s	1 cal/s =4.186 8 W (准确值)	
	千卡每小时	kcal/h	1 kcal/h=1.163 W (准确值)	
辐照度	卡每秒平方厘米	cal/(s·cm ²)	1 cal/(s·cm ²)=4.1868 W/m ² (准确值)	
	千卡每小时平方厘米	kcal/(h·cm ²)	1 kcal/(h·cm ²)=1.163 W/m ² (准确值)	
发光强度	国际烛光		1 国际烛光=1.02 cd	此数据取自 J·Terrien F· Desvignes:“La photométrie”
光亮度	尼 特	nt	1 nt=1 cd/m ² (准确值)	取自“国际电工辞典”第 45 组—照明。
	熙 提	sb	1 sb=10 ⁴ cd/m ² (准确值)	
	阿熙提	asb	1 asb =π ⁻¹ cd/m ² (准确值)	
	朗伯	L	1 L =π ⁻¹ ×10 ⁴ cd/m ² (准确值)	
	英尺朗伯 烛光每平方英尺	fL cd/ft ²	1 fL=3.426 cd/m ² 1 cd/ft ² =10.764 cd/m ²	

* 本表中的数据一般取自《中华人民共和国计量单位名称与符号方案(试行)》和有关量和单位 15 个国家标准(GB 3100—82, GB 3101—82, GB 3102.1~3102.13—82), 否则将在备注中加以说明。

续表

量名称	单位名称	单位符号	与 SI 单位的换算系数	备 注
光照度	幅 透	ph	1 ph=10 ⁴ lx (准确值)	取自“国际电工辞典”第 45 组—照明
	毫幅透	mph	1 mph=10 lx (准确值)	
	流明每平方英尺	lm/ft ²	1 lm/ft ² =10.764 lx	
	英尺烛光	fc	1 fc=10.764 lx	
光 量	流明小时	lm · h	1 lm · h=3600 lm · s (准确值)	
曝光量	勒克斯小时	lx · h	1 lx · h=3600 lx · s (准确值)	

附加说明：

本标准由全国量和单位标准化技术委员会提出并审查通过。主任委员杜庆华，副主任委员陈明绍。本标准由该委员会的第三分委员会提出，其成员如下：主任委员孙祖宝，副主任委员麦伟麟，委员（按姓氏笔划为序）叶关荣、张炳勋、陈星旦、何鸣皋、夏学江、徐大刚、袁一岳、晋达、谌取先。

本标准主要起草人徐大刚。