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Table A.1 Daily Absolute humidity over Air density Year 2000

Date	Absolute humidity/Air density [g/m ³]											
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sept	Oct	Nov.	Dec.
1	17.75	12.59	19.04	23.93	23.78	22.95	23.31	23.16	23.43	23.02	16.93	21.11
2	17.85	11.79	17.69	25.49	22.55	22.35	23.35	23.11	23.25	23.09	13.32	21.42
3	18.31	12.98	18.91	25.76	23.54	23.09	24.49	23.08	22.86	23.72	13.72	19.74
4	18.10	13.49	22.05	26.17	23.15	23.02	24.01	21.28	22.69	22.65	14.09	17.62
5	19.44	14.33	23.53	25.58	22.99	23.56	23.86	21.11	22.71	22.79	14.46	17.30
6	20.94	14.67	23.77	25.03	23.19	24.29	23.31	21.42	22.01	22.94	16.22	16.38
7	21.46	14.51	24.59	24.63	22.79	23.67	23.26	21.91	21.63	22.79	16.80	17.12
8	22.06	14.33	24.30	23.72	23.23	23.18	21.49	23.23	20.79	22.99	17.65	18.06
9	22.19	15.22	23.47	25.39	22.38	23.66	22.43	23.28	20.39	22.04	18.05	19.09
10	22.40	18.00	23.57	22.82	22.68	22.45	21.89	22.78	20.00	22.99	16.10	20.08
11	22.99	20.82	22.76	22.14	22.19	21.88	21.18	23.93	20.22	23.25	18.35	21.26
12	21.86	21.03	17.70	22.95	23.07	20.15	21.67	22.72	21.66	22.08	19.37	19.44
13	22.22	21.66	16.35	22.18	23.23	21.51	22.12	23.32	21.25	22.89	17.66	18.81
14	22.89	22.26	18.02	22.98	24.84	23.18	22.44	23.02	20.24	23.44	17.99	19.14
15	22.19	23.29	20.51	23.38	24.69	21.85	21.63	20.59	24.33	23.27	19.56	17.38
16	21.50	22.63	18.13	23.81	22.56	23.65	22.34	20.01	21.38	22.97	17.49	18.99
17	20.61	21.99	18.80	22.44	23.11	23.86	21.95	21.40	17.38	22.32	18.06	19.44
18	21.73	22.18	21.64	23.07	24.19	23.43	22.68	22.21	20.87	21.33	18.24	18.97
19	19.72	22.24	22.92	22.88	24.38	23.97	21.72	21.98	24.78	23.05	19.99	18.93
20	15.84	22.55	23.45	24.10	23.06	22.42	23.28	21.28	23.90	23.47	20.68	19.14
21	15.51	23.07	21.79	23.75	23.30	22.95	22.56	21.94	23.19	24.23	16.34	19.33
22	16.26	22.98	23.03	23.24	23.81	23.20	21.65	22.04	23.69	23.53	14.26	17.85
23	16.85	23.17	24.36	24.38	24.22	23.51	21.76	21.75	22.03	23.23	15.60	15.64
24	15.79	23.84	22.16	23.30	24.14	22.74	22.05	22.27	23.56	22.63	17.42	13.57
25	18.37	21.49	20.74	24.26	23.70	22.99	21.10	22.45	23.57	23.57	19.80	13.41
26	17.43	21.56	19.51	24.03	22.92	21.68	20.11	22.25	22.24	23.43	21.58	17.11
27	13.14	16.19	19.39	24.43	23.26	23.96	20.69	22.50	20.49	23.51	22.28	15.69
28	13.14	17.98	21.08	24.04	23.28	23.12	20.59	20.94	23.81	24.05	21.14	16.11
29	13.37	20.81	24.01	23.91	23.47	22.98	21.25	22.21	25.50	23.51	20.55	17.37
30	14.17		23.34	23.90	24.85	23.48	22.54	22.85	23.02	22.98	20.35	19.22
31	14.26		23.73		24.28		22.48	21.87		22.57		18.39

Table A.2 Daily Absolute humidity over Air density Year 2001

Date	Absolute humidity/Air density [g/m ³]											
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sept	Oct	Nov.	Dec.
1	15.21	20.41	24.12	24.80	24.75	24.59	22.03	21.53	22.36	23.36	23.14	19.68
2	15.83	21.76	24.03	24.91	24.23	23.96	20.65	20.78	22.01	23.64	22.12	19.97
3	16.11	23.05	24.01	24.24	24.25	23.87	21.55	21.48	22.55	23.51	23.57	22.77
4	16.11	23.68	24.20	24.87	24.20	24.25	22.00	22.78	22.88	23.34	23.41	21.89
5	18.80	22.89	21.79	24.86	24.78	22.18	22.77	23.14	24.18	24.20	23.11	20.73
6	19.14	21.94	23.20	24.68	25.14	23.15	21.28	23.82	24.12	23.92	21.08	20.91
7	20.79	23.74	24.29	24.62	24.80	24.43	24.17	23.71	24.28	23.65	20.48	20.43
8	22.47	24.15	23.10	24.46	22.01	24.15	23.81	23.64	23.05	24.20	20.39	20.79
9	22.36	23.08	21.86	25.24	22.74	23.69	24.37	21.21	22.66	24.05	18.80	17.53
10	23.20	22.30	20.21	27.15	22.28	22.43	22.94	22.29	22.06	22.65	17.85	17.62
11	23.13	19.64	20.03	26.60	22.08	22.41	23.73	21.21	22.07	22.78	16.67	18.23
12	22.03	19.91	20.60	24.08	23.21	22.72	22.48	21.86	23.41	23.59	16.65	18.68
13	22.36	20.72	19.42	25.83	23.54	20.72	21.43	22.05	22.41	23.64	17.88	20.74
14	22.53	20.20	20.93	24.71	22.02	22.19	21.93	22.53	22.55	24.46	16.92	19.72
15	21.47	17.43	21.26	24.49	22.63	20.56	22.71	19.65	23.41	24.35	14.19	16.30
16	18.06	14.33	22.01	24.59	23.53	20.82	22.51	21.25	26.17	23.29	14.26	17.45
17	16.07	13.41	23.31	24.23	23.92	22.48	21.39	21.85	23.16	23.48	15.06	20.06
18	17.01	15.73	22.78	25.54	23.03	21.73	21.60	22.10	23.91	22.67	14.51	20.89
19	18.32	20.67	22.94	24.91	23.07	19.85	21.98	21.02	23.82	23.16	14.17	20.20
20	19.58	22.32	22.50	23.04	23.04	20.12	21.48	21.34	23.49	22.72	13.29	18.62
21	22.19	23.39	23.39	24.01	23.91	21.22	20.72	21.43	23.95	21.63	13.35	17.57
22	22.18	23.52	25.68	24.22	23.54	22.05	22.29	21.00	23.95	21.04	13.14	12.96
23	22.59	23.16	21.52	24.60	23.00	21.59	22.38	21.88	23.66	21.68	14.95	11.14
24	22.55	19.71	22.28	25.25	22.45	20.69	23.43	21.60	24.38	23.11	15.79	11.41
25	22.61	15.85	23.39	25.10	22.67	22.93	22.15	21.56	24.65	23.25	16.53	12.50
26	22.32	21.54	22.90	25.01	23.45	22.38	23.29	21.74	24.25	23.66	12.11	13.86
27	22.22	22.60	23.18	23.70	23.78	22.03	23.67	21.35	23.70	23.36	13.23	15.43
28	22.53	23.31	21.67	25.28	23.16	22.86	22.36	21.79	23.68	23.62	15.14	16.30
29	21.16		22.01	26.07	22.63	23.55	21.95	22.23	23.94	23.46	17.34	14.91
30	17.55		23.85	24.26	23.22	23.06	21.48	21.34	24.03	23.14	18.67	13.68
31	20.36		25.56		22.94		22.29	22.18		22.90		14.01

Table A.3 Daily Absolute humidity over Air density Year 2002

Date	Absolute humidity/Air density [g/m ³]											
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sept	Oct	Nov.	Dec.
1	15.02	17.12	23.32	23.15	22.56	24.18	24.33	24.31	21.71	23.67	22.89	22.50
2	12.93	21.42	23.45	24.65	24.34	23.76	24.44	24.18	21.25	24.17	23.38	22.73
3	11.82	21.37	23.06	24.03	24.66	25.08	24.44	23.78	20.78	23.80	19.97	23.07
4	13.03	21.13	23.47	23.92	23.88	23.82	25.70	21.71	21.38	23.34	15.88	23.55
5	14.05	21.26	23.46	23.03	24.32	24.30	25.07	20.96	21.98	23.92	14.92	22.00
6	14.53	20.86	22.51	23.28	24.32	23.77	24.07	21.33	21.99	23.45	15.44	22.32
7	13.68	21.46	20.23	24.76	25.53	24.51	25.16	21.71	21.54	21.61	18.26	23.10
8	13.68	21.51	17.27	24.28	24.56	24.86	25.65	21.71	21.04	18.17	17.58	23.53
9	14.68	22.55	17.04	23.88	25.17	24.57	25.61	21.13	21.90	17.69	16.84	21.13
10	15.46	21.95	20.04	24.25	24.66	24.28	25.59	20.43	23.23	16.17	17.74	17.96
11	16.22	22.20	22.91	25.02	24.51	24.64	26.10	21.56	22.71	15.47	20.74	18.51
12	18.66	22.76	22.44	21.15	23.59	24.01	24.56	21.64	23.61	18.33	23.67	19.84
13	20.48	22.98	23.14	20.81	24.47	23.55	25.11	21.31	22.15	19.11	23.51	18.88
14	20.17	22.38	24.08	22.68	25.02	23.66	25.09	20.64	21.41	19.28	23.94	18.68
15	19.66	22.08	24.11	23.67	23.98	24.87	25.60	21.99	20.30	21.15	25.34	19.64
16	21.08	21.41	24.38	24.57	23.14	24.95	25.71	20.93	21.21	23.31	25.32	20.08
17	20.57	21.71	24.21	24.65	22.61	23.51	24.63	20.90	20.48	24.89	24.24	19.97
18	19.88	22.05	23.07	24.24	23.10	24.03	24.60	21.85	21.39	23.72	22.33	21.14
19	19.51	22.49	22.36	24.27	24.27	23.53	26.34	20.02	23.23	23.52	21.03	22.54
20	22.24	18.99	20.84	24.01	23.67	23.47	24.18	19.83	23.36	21.76	21.28	22.96
21	22.89	21.78	23.20	24.25	23.39	24.33	25.23	22.47	22.36	22.61	21.71	21.81
22	19.68	22.14	23.16	25.04	23.39	24.61	23.73	23.34	22.83	23.09	21.86	17.27
23	16.93	22.74	23.69	21.98	23.48	23.78	20.96	22.18	23.00	22.79	22.91	17.85
24	18.42	22.82	20.41	22.92	24.11	24.90	21.50	22.56	22.46	22.53	21.41	19.46
25	20.47	20.76	24.08	23.81	25.08	24.49	21.17	24.03	22.68	19.37	22.10	19.69
26	21.33	23.60	24.84	24.04	24.91	25.19	21.68	23.64	23.08	21.62	21.81	20.99
27	22.30	22.85	25.25	24.45	23.90	25.82	21.81	23.54	23.72	27.89	20.02	22.35
28	21.41	23.44	24.37	24.93	23.28	25.66	20.85	21.43	24.05	26.24	19.50	16.68
29	18.97		23.94	23.94	23.84	24.07	22.29	21.63	23.14	21.99	22.14	17.94
30	15.68		24.33	24.08	23.89	24.08	25.40	21.26	22.87			19.58
31	16.81		24.65		24.76			21.02				19.76

Table A.4 Daily Absolute humidity over Air density Year 2003

Date	Absolute humidity/Air density [g/m ³]											
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sept	Oct	Nov.	Dec.
1	20.39	16.73	23.88	23.71	22.16	23.18	22.92	21.88	21.74	23.67	19.34	15.17
2	20.73	16.72	24.63	22.73	23.52	22.65	23.05	21.67	21.02	23.27	19.31	15.08
3	18.29	17.43	24.45	21.82	23.59	21.42	24.05	21.83	20.67	22.83	19.45	15.18
4	16.46	18.41	24.84	23.71	24.71	22.34	24.28	22.43	20.20	20.10	14.35	15.10
5	17.54	13.92	23.13	23.62	24.52	23.16	22.37	22.67	21.83	21.92	19.67	16.19
6	18.70	13.86	23.24	23.60	25.46	23.04	23.69	22.06	22.11	23.06	20.90	16.07
7	19.77	14.31	22.56	23.71	25.13	22.78	24.25	23.09	21.89	23.90	21.91	16.86
8	17.33	16.48	23.90	25.67	24.98	22.08	23.81	23.21	20.26	24.75	21.28	17.35
9	16.91	20.02	22.04	25.52	22.64	21.20	23.94	23.54	20.66	23.86	20.68	17.76
10	16.16	22.21	20.19	24.47	23.69	22.99	23.00	23.71	21.84	24.25	20.16	18.54
11	15.89	24.19	21.24	24.17	23.63	22.29	21.91	22.84	21.87	24.31	19.68	19.11
12	14.15	22.34	22.23	23.86	24.15	22.27	23.45	24.00	22.21	24.59	17.44	18.34
13	14.84	22.85	21.20	25.07	23.53	20.73	23.97	23.70	22.49	23.79	16.33	15.06
14	15.35	22.22	19.77	25.14	21.96	22.40	23.66	24.70	21.68	22.72	18.44	13.62
15	17.38	22.65	20.76	24.69	23.27	21.18	23.37	23.69	22.71	22.10	20.64	13.16
16	18.09	23.42	22.54	23.10	21.81	21.84	23.16	25.30	23.18	20.52	21.64	13.09
17	18.71	23.41	22.73	23.84	22.07	22.54	22.11	24.54	23.37	20.19	20.56	14.30
18	20.33	23.99	23.44	22.93	22.13	23.10	23.93	23.98	24.04	21.87	20.29	15.68
19	19.02	23.01	23.43	24.62	22.96	21.59	22.91	23.02	22.70	19.51	22.34	14.44
20	15.68	22.24	23.59	24.26	23.12	21.48	23.10	22.48	22.71	20.97	23.36	11.55
21	18.38	23.39	23.28	24.73	22.84	22.89	21.82	22.95	22.94	20.59	23.15	11.28
22	19.84	22.48	22.66	25.19	23.59	23.50	21.41	23.26	22.72	19.92	19.56	12.35
23	21.01	24.11	22.63	24.57	22.27	23.14	22.34	22.41	23.73	21.70	18.03	15.26
24	20.23	22.09	21.88	23.56	22.15	22.89	23.58	23.15	23.78	22.00	19.28	16.15
25	19.85	23.32	22.03	23.37	22.52	20.72	23.11	21.75	23.65	22.52	19.12	17.86
26	20.87	24.09	22.11	23.97	22.21	22.89	24.31	21.44	22.84	22.23	19.74	17.26
27	21.88	22.98	22.11	22.91	21.06	23.25	23.19	21.45	23.26	21.77	18.60	13.77
28	22.39	23.31	23.01	22.78	20.74	23.15	23.24	21.54	24.12	20.49	15.90	14.74
29	19.99		22.37	22.79	21.06	22.62	22.73	20.30	23.83	19.93	14.79	15.80
30	15.69		22.36	22.53	21.80	23.52	23.42	21.91	23.41	18.09	15.44	15.83
31	17.12		22.95		22.72		22.00	22.44		19.34		14.86



Table A.5 Daily Absolute humidity over Air density Year 2004

Date	Absolute humidity/Air density [g/m ³]											
	Jan.	Feb.	Mar.	Apr.	May.	Jun.	Jul.	Aug.	Sept	Oct	Nov.	Dec.
1	16.17	23.37	21.68	24.37	26.18	22.34	22.25	22.59	24.22	22.22	18.07	16.17
2	16.73	23.23	21.83	23.77	25.38	22.91	22.44	20.47	23.94	22.38	17.34	15.58
3	16.26	24.15	24.15	23.62	26.18	22.07	23.42	22.32	22.95	20.77	17.12	16.26
4	17.62	24.15	25.14	22.80	25.12	21.93	22.67	22.63	23.24	21.08	17.54	16.37
5	17.61	22.81	23.49	24.66	25.25	24.21	23.52	23.24	23.64	21.50	17.84	15.25
6	15.94	22.53	23.80	24.57	23.77	25.78	23.37	22.43	22.84	22.25	18.91	13.17
7	15.59	21.81	20.38	23.87	25.07	25.12	25.15	22.14	20.64	22.28	18.36	13.21
8	16.72	19.38	16.13	23.44	25.16	24.52	22.30	21.96	19.93	21.70	19.37	12.51
9	17.85	16.24	15.39	24.70	24.47	23.48	22.41	22.45	20.18	21.87	21.74	13.06
10	20.07	15.56	17.26	24.27	24.13	24.41	22.38	22.15	20.33	21.48	23.69	14.20
11	22.43	15.82	23.60	24.55	23.57	23.94	20.83	21.38	21.91	22.99	22.96	15.06
12	20.07	15.03	24.47	25.50	21.43	23.67	20.95	21.19	21.23	20.90	23.73	15.58
13	19.74	14.19	25.53	25.52	22.72	23.40	20.55	20.08	22.25	21.45	22.34	14.10
14	19.87	13.40	25.08	22.95	22.56	22.77	22.37	19.81	22.13	21.49	22.87	14.23
15	22.04	14.57	24.44	25.16	24.56	22.63	21.04	19.96	20.91	20.37	22.09	13.05
16	22.04	15.64	23.85	22.36	20.41	22.33	20.55	20.88	21.77	20.91	23.15	14.06
17	22.14	19.12	22.79	20.81	22.43	21.18	20.88	21.77	23.91	19.14	20.11	15.44
18	22.01	20.90	22.61	21.53	24.32	21.91	21.01	22.44	23.65	17.36	17.54	15.73
19	21.94	21.90	24.07	24.18	23.29	23.65	21.92	22.88	22.25	18.19	16.64	13.38
20	22.30	22.60	24.60	24.50	24.18	23.89	21.20	22.69	22.59	18.72	17.70	14.76
21	22.08	22.69	23.41	23.26	23.63	23.08	20.81	22.48	23.19	19.58	14.51	14.40
22	18.54	23.29	25.27	24.30	21.33	21.33	22.34	22.57	23.37	20.19	12.52	17.25
23	18.09	23.30	25.30	25.59	21.04	20.37	23.40	21.88	23.69	19.51	14.02	17.92
24	15.26	22.95	21.37	25.59	21.64	20.26	22.75	22.14	23.01	19.52	15.59	16.57
25	12.62	22.17	21.00	24.94	21.63	21.36	23.15	22.16	23.60	19.42	17.54	18.42
26	14.78	20.38	22.56	24.92	22.86	21.13	21.94	23.03	23.59	15.29	18.22	16.02
27	15.55	20.38	23.78	25.76	23.10	21.61	21.71	22.59	23.87	15.68	18.25	15.64
28	17.52	21.79	25.10	23.79	22.87	21.99	21.77	23.20	20.65	19.00	17.41	14.53
29	20.22	22.13	24.92	23.25	23.44	22.25	21.80	23.67	21.35	20.37	18.32	13.86
30	23.01		24.72	24.19	22.94	22.61	21.52	23.17	22.08	20.26	17.95	15.36
31	23.73		24.38		22.11		22.22	23.77		18.73		14.63

Table B.1 Flashover Voltage Using Positive Lightning Impulse Tests for Line-post Insulator 57-2

h/δ [g/m ³]	U _{50%} [kV]	U _{50%/K₁} [kV]	U _{50%/K_d} [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
14.1	177.0	183.8	180.7	1.04	1.47	0.482	1.02	180.6	0.97	1	0.97	178.9	14.8	1.00	181.3
12.5	177.9	184.3	181.2	1.02	1.50	0.438	1.01	182.7	0.99	1	0.99	181.8	13.0	1.02	184.3
11.9	179.1	182.7	179.7	1.01	1.50	0.439	1.01	181.8	0.99	1	0.99	181.1	12.4	1.02	183.8
10.8	177.7	181.9	178.9	1.00	1.51	0.424	1.00	181.9	1.00	1	1.00	182.0	11.2	1.03	184.7
10.1	179.9	182.9	179.9	0.99	1.53	0.395	1.00	183.5	1.01	1	1.01	184.1	10.5	1.04	186.9
9.7	180.4	181.5	178.5	0.99	1.52	0.401	0.99	182.4	1.01	1	1.01	183.2	9.9	1.04	186.2
8.0	176.6	177.6	174.6	0.97	1.52	0.438	0.99	180.0	1.02	1	1.02	182.0	8.1	1.06	184.3
10.0	181.4	181.1	178.1	0.99	1.52	0.411	1.00	181.9	1.01	1	1.01	182.4	10.2	1.04	185.5
9.4	179.0	180.6	177.6	0.99	1.52	0.407	0.99	181.7	1.01	1	1.01	182.7	9.7	1.05	185.6
20.5	192.7	201.0	197.6	1.10	1.51	0.422	1.04	192.7	0.93	1	0.93	186.1	21.6	0.96	189.1
19.3	194.4	203.0	199.6	1.09	1.54	0.373	1.03	196.5	0.94	1	0.94	189.8	20.2	0.97	192.7
18.5	193.2	200.3	197.0	1.08	1.54	0.385	1.03	194.3	0.94	1	0.94	188.4	19.4	0.97	191.2
17.7	184.3	192.5	189.3	1.07	1.49	0.457	1.03	186.3	0.95	1	0.95	182.3	18.5	0.98	184.9
20.1	194.4	200.7	197.4	1.10	1.52	0.412	1.04	193.1	0.93	1	0.93	186.5	21.0	0.96	189.5
21.9	197.8	205.0	201.6	1.12	1.52	0.403	1.05	196.1	0.92	1	0.92	187.9	22.8	0.95	191.3
19.3	191.8	199.6	196.3	1.09	1.52	0.409	1.04	192.6	0.94	1	0.94	186.6	20.2	0.97	189.5
17.3	185.9	194.5	191.2	1.07	1.51	0.427	1.03	188.9	0.95	1	0.95	184.7	18.2	0.98	187.2
21.6	195.8	203.2	199.9	1.11	1.51	0.416	1.05	194.3	0.92	1	0.92	186.7	22.6	0.95	190.0
21.5	193.0	198.7	195.5	1.11	1.48	0.461	1.05	189.3	0.92	1	0.92	182.7	22.4	0.95	186.0
19.9	193.2	198.8	195.5	1.09	1.51	0.427	1.04	191.3	0.93	1	0.93	185.1	20.7	0.96	188.1
23.1	192.8	199.1	195.8	1.13	1.46	0.493	1.06	187.5	0.91	1	0.91	180.8	24.1	0.94	184.5
21.9	195.9	201.0	197.7	1.11	1.50	0.442	1.05	191.6	0.92	1	0.92	184.2	22.7	0.95	187.7
21.9	193.2	198.2	195.0	1.11	1.48	0.474	1.05	188.3	0.92	1	0.92	181.7	22.7	0.95	185.2
21.0	197.6	204.3	200.9	1.11	1.53	0.392	1.04	196.3	0.92	1	0.92	188.5	21.9	0.95	191.8
23.2	196.4	202.0	198.7	1.13	1.49	0.459	1.06	191.1	0.91	1	0.91	183.4	24.1	0.94	187.2
22.4	197.7	202.9	199.5	1.12	1.50	0.433	1.05	193.2	0.91	1	0.91	185.2	23.3	0.95	188.9
20.4	193.5	199.0	195.8	1.10	1.50	0.434	1.04	192.7	0.93	1	0.93	184.5	21.3	0.96	189.1

Table B.2 Flashover Voltage Using Positive Lightning Impulse Tests for Line-post Insulator 57-3

h/δ [g/m ³]	U _{50%} [kV]	U _{50%/K₁} [kV]	U _{50%/K_d} [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
13.8	206.8	214.8	211.2	1.03	1.34	0.715	1.02	209.8	0.98	1	0.98	209.7	14.5	1.01	212.4
12.4	215.8	220.3	216.6	1.02	1.39	0.612	1.01	218.1	0.99	1	0.99	217.5	12.9	1.02	220.7
12.4	215.8	220.3	216.6	1.02	1.39	0.612	1.01	218.1	0.99	1	0.99	217.5	12.9	1.02	220.7
10.6	209.0	214.0	210.5	1.00	1.38	0.637	1.00	214.3	1.00	1	1.00	214.5	11.0	1.03	217.8
9.4	212.4	214.3	210.8	0.99	1.40	0.602	0.99	216.2	1.01	1	1.01	216.9	9.7	1.05	220.3
7.8	204.8	208.0	204.5	0.97	1.38	0.632	0.98	212.1	1.03	1	1.03	213.4	8.1	1.06	215.9
10.8	211.2	214.6	211.1	1.00	1.38	0.636	1.00	214.7	1.00	1	1.00	214.7	11.2	1.03	218.1
8.6	211.2	213.1	209.6	0.98	1.40	0.595	0.99	216.0	1.02	1	1.02	217.1	8.8	1.05	220.3
9.2	202.9	206.8	203.3	0.98	1.35	0.689	0.99	209.0	1.01	1	1.01	209.6	9.6	1.05	212.7
10.1	218.2	218.7	215.1	0.99	1.42	0.567	0.99	219.8	1.01	1	1.01	220.1	10.3	1.04	223.8
9.4	212.4	214.3	210.8	0.99	1.40	0.602	0.99	216.3	1.01	1	1.01	216.9	9.7	1.05	220.3
19.9	216.4	223.8	220.1	1.10	1.31	0.759	1.07	208.9	0.93	1	0.93	208.4	20.7	0.96	211.8
20.7	213.5	223.8	220.1	1.11	1.30	0.787	1.08	206.6	0.93	1	0.93	207.0	21.8	0.96	210.3
23.4	216.6	224.7	221.0	1.13	1.28	0.837	1.11	202.5	0.91	1	0.91	203.6	24.5	0.94	207.8
21.9	221.6	227.3	223.5	1.11	1.31	0.765	1.09	209.2	0.92	1	0.92	208.3	22.7	0.95	212.3
21.5	214.0	220.3	216.7	1.11	1.27	0.839	1.09	201.6	0.92	1	0.92	202.5	22.4	0.95	206.2
19.5	209.6	217.3	213.8	1.09	1.28	0.827	1.08	202.1	0.93	1	0.93	203.0	20.4	0.96	206.1
22.9	211.2	217.6	214.0	1.13	1.24	0.905	1.11	195.5	0.91	1	0.91	197.9	23.8	0.94	201.9
22.9	218.1	224.5	220.8	1.13	1.28	0.823	1.10	203.6	0.91	1	0.91	204.2	23.8	0.94	208.4
17.0	207.7	214.7	211.2	1.07	1.30	0.797	1.05	204.1	0.95	1	0.95	204.4	17.8	0.98	207.2
15.1	210.5	218.9	215.3	1.05	1.34	0.700	1.03	212.0	0.97	1	0.97	211.5	15.8	1.00	214.3
15.5	213.2	220.7	217.1	1.05	1.35	0.688	1.03	213.4	0.96	1	0.96	212.6	16.2	0.99	215.5
16.1	211.4	219.4	215.8	1.06	1.34	0.718	1.04	210.9	0.96	1	0.96	210.4	16.8	0.99	213.2
16.9	213.6	219.5	215.9	1.06	1.33	0.734	1.05	209.8	0.95	1	0.95	209.1	17.6	0.98	212.2
19.6	211.4	219.3	215.7	1.09	1.29	0.807	1.07	204.1	0.93	1	0.93	204.6	20.6	0.96	207.7
15.1	211.4	219.3	215.7	1.05	1.35	0.695	1.03	212.5	0.97	1	0.97	211.9	15.8	1.00	214.7
18.6	212.6	220.7	217.1	1.08	1.31	0.767	1.06	207.6	0.94	1	0.94	207.4	19.5	0.97	210.5

Table B.3 Flashover Voltage Using Positive Lightning Impulse Tests for Line-post Insulator 57-4

h/δ [g/m ³]	U _{50%} [kV]	U _{50%/K₁} [kV]	U _{50%/K_d} [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
13.7	238.5	246.7	242.6	1.03	1.30	0.788	1.02	240.8	0.98	1	0.98	241.1	14.3	1.01	244.3
14.1	241.6	250.7	246.6	1.04	1.31	0.788	1.03	243.7	0.97	1	0.97	244.1	14.8	1.00	247.3
12.2	236.1	245.0	241.0	1.02	1.31	0.788	1.01	241.9	0.99	1	0.99	242.3	12.8	1.02	245.6
12.2	236.1	245.0	241.0	1.02	1.31	0.788	1.01	241.9	0.99	1	0.99	242.3	12.8	1.02	245.6
12.2	242.6	246.7	242.7	1.01	1.32	0.788	1.01	244.1	0.99	1	0.99	244.1	12.6	1.02	247.7
11.3	245.9	251.8	247.6	1.01	1.36	0.788	1.00	250.6	1.00	1	1.00	250.8	11.8	1.03	254.6
7.8	232.6	235.0	231.1	0.97	1.32	0.788	0.98	240.9	1.03	1	1.03	241.2	8.0	1.06	244.0
7.5	228.1	232.8	228.9	0.97	1.31	0.788	0.97	239.0	1.03	1	1.03	239.4	7.8	1.06	241.9
9.4	238.4	240.8	236.9	0.99	1.33	0.788	0.99	243.6	1.01	1	1.01	243.7	9.7	1.05	247.5
7.9	233.4	234.2	230.3	0.97	1.31	0.788	0.98	240.0	1.03	1	1.03	240.1	8.0	1.06	243.1
9.7	236.5	238.1	234.2	0.99	1.31	0.788	0.99	240.5	1.01	1	1.01	240.4	9.9	1.04	244.3
9.4	237.5	241.5	237.6	0.99	1.33	0.788	0.99	244.3	1.01	1	1.01	244.5	9.7	1.04	248.2
20.4	252.9	262.1	257.7	1.10	1.29	0.802	1.08	242.5	0.87	1	0.87	227.4	21.3	0.96	247.0
21.2	254.0	264.9	260.6	1.11	1.30	0.796	1.09	243.6	0.85	1	0.85	226.2	22.2	0.95	248.2
18.9	252.7	263.9	259.5	1.09	1.32	0.751	1.07	247.7	0.85	1	0.85	225.3	19.9	0.97	251.1
19.3	254.6	266.2	261.8	1.09	1.33	0.738	1.07	249.5	0.85	1	0.85	227.3	20.2	0.97	252.7
20.1	257.0	266.2	261.8	1.10	1.32	0.753	1.07	248.1	0.86	1	0.86	229.1	21.0	0.96	251.4
19.6	256.1	267.1	262.7	1.09	1.33	0.735	1.07	250.0	0.85	1	0.85	228.0	20.6	0.96	253.0
20.7	259.4	268.1	263.7	1.10	1.32	0.749	1.08	248.9	0.87	1	0.87	232.6	21.6	0.96	252.2
21.0	257.4	265.1	260.7	1.11	1.30	0.782	1.08	245.0	0.87	1	0.87	231.8	21.8	0.96	249.0
20.4	252.2	261.2	256.9	1.10	1.29	0.809	1.08	241.6	0.86	1	0.86	224.8	21.3	0.96	246.1
19.8	253.7	263.2	258.8	1.10	1.31	0.775	1.07	245.3	0.86	1	0.86	226.5	20.7	0.96	249.1
18.3	247.8	258.7	254.4	1.08	1.30	0.787	1.06	243.3	0.85	1	0.85	220.9	19.2	0.97	247.3
22.7	260.0	268.7	264.3	1.12	1.30	0.791	1.10	244.8	0.87	1	0.87	233.1	23.7	0.94	249.5
21.4	259.0	265.6	261.2	1.11	1.30	0.785	1.08	244.9	0.88	1	0.88	234.1	22.2	0.95	248.9
22.4	260.8	267.5	263.1	1.12	1.30	0.791	1.09	244.6	0.88	1	0.88	235.8	23.3	0.95	249.1
19.2	250.3	259.6	255.3	1.09	1.30	0.796	1.07	242.6	0.86	1	0.86	223.4	20.0	0.97	246.7

Table B.4 Flashover Voltage Using Negative Lightning Impulse Tests for Line-post Insulator 57-2

h/δ [g/m ³]	U _{50%} [kV]	U _{50%/K₁} [kV]	U _{50%/K_d} [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
14.4	257.3	267.3	262.9	1.04	2.13	0	1	267.3	0.97	1	0.97	259.6	15.2	1.00	263.0
12.4	265.1	269.6	265.1	1.02	2.20	0	1	269.6	0.99	1	0.99	266.2	12.8	1.02	270.1
12.4	264.8	269.3	264.8	1.02	2.20	0	1	269.3	0.99	1	0.99	265.9	12.8	1.02	269.8
11.7	263.0	268.4	263.9	1.01	2.21	0	1	268.4	0.99	1	0.99	266.6	12.1	1.03	270.6
10.8	262.1	268.4	264.0	1.00	2.23	0	1	268.4	1.00	1	1.00	268.5	11.2	1.03	272.5
10.7	266.1	271.5	267.0	1.00	2.25	0	1	271.5	1.00	1	1.00	271.8	11.1	1.03	276.0
9.7	266.2	267.7	263.2	0.99	2.25	0	1	267.7	1.01	1	1.01	270.3	9.9	1.04	274.7
9.7	262.6	265.0	260.6	0.99	2.23	0	1	265.0	1.01	1	1.01	267.7	9.9	1.04	271.9
7.8	267.3	268.8	264.3	0.97	2.30	0	1	268.8	1.03	1	1.03	275.9	7.9	1.06	279.2
9.5	265.3	271.3	266.8	0.99	2.28	0	1	271.3	1.01	1	1.01	274.3	9.9	1.04	278.4
10.2	265.7	265.3	260.9	0.99	2.22	0	1	265.3	1.01	1	1.01	266.8	10.3	1.04	271.4
9.2	267.6	270.0	265.6	0.98	2.28	0	1	270.0	1.01	1	1.01	273.7	9.5	1.05	278.0
18.5	273.8	283.9	279.2	1.08	2.18	0	1	283.9	0.94	1	0.94	267.0	19.4	0.97	271.0
20.1	271.7	280.6	275.9	1.10	2.12	0	1	280.6	0.93	1	0.93	260.6	21.0	0.96	264.9
21.5	274.4	282.3	277.7	1.11	2.11	0	1	282.3	0.92	1	0.92	259.5	22.4	0.95	264.3
21.5	273.7	281.8	277.2	1.11	2.10	0	1	281.8	0.92	1	0.92	259.1	22.4	0.95	263.8
20.1	279.1	287.3	282.5	1.10	2.17	0	1	287.3	0.93	1	0.93	266.8	21.0	0.96	271.3
22.0	278.6	286.6	281.9	1.12	2.13	0	1	286.6	0.92	1	0.92	262.4	23.0	0.95	267.3
21.6	274.8	281.9	277.3	1.11	2.10	0	1	281.9	0.92	1	0.92	258.9	22.5	0.95	263.8
22.1	272.3	279.4	274.8	1.12	2.08	0	1	279.4	0.91	1	0.91	255.6	23.0	0.95	260.6
21.3	277.3	287.8	283.0	1.11	2.15	0	1	287.8	0.92	1	0.92	265.0	22.3	0.95	269.6
20.7	283.4	291.5	286.7	1.10	2.19	0	1	291.5	0.93	1	0.93	269.7	21.5	0.96	274.4
22.9	280.4	287.4	282.7	1.12	2.12	0	1	287.4	0.91	1	0.91	261.4	23.8	0.94	266.8
17.9	272.1	281.7	277.1	1.08	2.17	0	1	281.7	0.94	1	0.94	266.2	18.8	0.97	270.1
15.1	276.2	287.4	282.6	1.05	2.28	0	1	287.4	0.97	1	0.97	277.6	15.8	1.00	281.3
17.1	278.8	286.4	281.7	1.07	2.23	0	1	286.4	0.95	1	0.95	272.3	17.9	0.98	276.3
17.1	278.8	286.4	281.7	1.07	2.23	0	1	286.4	0.95	1	0.95	272.3	17.9	0.98	276.3

Table B.5 Flashover Voltage Using Negative Lightning Impulse Tests for Line-post Insulator 57-3

h/δ [g/m ³]	U _{50%} [kV]	U _{50%/K₁} [kV]	U _{50%/K_d} [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
13.5	298.3	309.9	304.8	1.03	1.93	0.022	1.00	309.7	0.98	1	0.98	303.3	14.2	1.01	307.3
12.4	290.9	296.9	291.9	1.02	1.88	0.010	1.00	296.8	0.99	1	0.99	293.1	12.9	1.02	297.4
12.4	290.9	296.9	291.9	1.02	1.88	0.049	1.00	296.6	0.99	1	0.99	293.1	12.9	1.02	297.4
10.8	292.9	299.9	295.0	1.00	1.93	0.025	1.00	299.9	1.00	1	1.00	300.0	11.2	1.03	304.5
9.4	300.0	302.8	297.8	0.99	1.98	0.007	1.00	302.8	1.01	1	1.01	306.4	9.7	1.05	311.2
8.4	299.5	302.2	297.2	0.97	1.99	0.002	1.00	302.2	1.02	1	1.02	308.4	8.6	1.05	312.8
8.1	300.3	302.0	297.0	0.97	2.00	0.001	1.00	302.0	1.02	1	1.02	309.0	8.3	1.05	313.1
9.2	298.4	304.1	299.1	0.98	1.99	0.003	1.00	304.1	1.01	1	1.01	308.3	9.6	1.05	312.9
10.1	297.9	298.6	293.6	0.99	1.94	0.021	1.00	298.6	1.01	1	1.01	300.5	10.3	1.04	305.6
9.7	298.8	301.5	296.5	0.99	1.96	0.011	1.00	301.5	1.01	1	1.01	304.5	9.9	1.04	309.4
18.8	287.5	299.1	294.1	1.09	1.77	0.123	1.01	296.0	0.94	1	0.94	280.6	19.7	0.97	284.9
18.6	296.2	309.7	304.6	1.08	1.84	0.074	1.01	307.9	0.94	1	0.94	291.1	19.5	0.97	295.4
17.6	285.2	298.5	293.6	1.07	1.79	0.110	1.01	296.1	0.95	1	0.95	282.7	18.5	0.98	286.6
20.4	291.4	302.5	297.5	1.10	1.77	0.127	1.01	298.8	0.93	1	0.93	280.5	21.3	0.96	285.0
20.3	292.0	306.0	300.9	1.10	1.78	0.112	1.01	302.6	0.93	1	0.93	283.8	21.4	0.96	288.2
17.6	293.0	303.3	298.3	1.07	1.82	0.087	1.01	301.4	0.95	1	0.95	287.2	18.5	0.98	291.4
17.1	295.3	303.3	298.3	1.07	1.83	0.079	1.01	301.8	0.95	1	0.95	288.4	17.9	0.98	292.6
19.6	289.5	300.4	295.4	1.09	1.77	0.126	1.01	297.0	0.93	1	0.93	280.2	20.6	0.96	284.5
14.8	288.8	299.6	294.7	1.04	1.85	0.068	1.00	298.8	0.97	1	0.97	290.2	15.5	1.00	294.0
18.3	289.1	300.1	295.2	1.08	1.79	0.110	1.01	297.6	0.94	1	0.94	282.8	19.2	0.97	286.9
18.3	289.8	300.8	295.9	1.08	1.79	0.107	1.01	298.4	0.94	1	0.94	283.4	19.2	0.97	287.6

Table B.6 Flashover Voltage Using Negative Lightning Impulse Tests for Line-post Insulator 57-4

h/δ [g/m ³]	U _{50%} [kV]	U _{50%/K₁} [kV]	U _{50%/K_d} [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
13.7	325.7	336.9	331.3	1.03	1.77	0.120	1.00	335.6	0.98	1	0.98	329.2	14.3	1.01	329.7
13.5	320.5	332.9	327.5	1.03	1.76	0.135	1.00	331.6	0.98	1	0.98	325.9	14.2	1.01	329.0
12.5	321.9	334.6	329.1	1.02	1.78	0.113	1.00	333.9	0.99	1	0.99	330.1	13.1	1.02	327.8
12.5	321.9	334.6	329.1	1.02	1.78	0.113	1.00	333.9	0.99	1	0.99	330.1	13.1	1.02	327.5
8.0	337.3	341.4	335.8	0.97	1.91	0.033	1.00	341.7	1.02	1	1.02	349.6	8.3	1.05	328.1
9.4	325.7	328.7	323.3	0.99	1.81	0.090	1.00	329.1	1.01	1	1.01	332.6	9.7	1.05	327.6
7.9	328.9	329.6	324.1	0.97	1.85	0.066	1.00	330.3	1.03	1	1.03	338.0	8.0	1.06	323.0
9.7	320.6	322.4	317.1	0.99	1.77	0.120	1.00	322.9	1.01	1	1.01	325.5	9.9	1.04	330.8
9.0	329.4	334.6	329.1	0.98	1.85	0.064	1.00	335.0	1.02	1	1.02	339.9	9.3	1.05	324.2
20.5	341.4	356.1	350.2	1.10	1.75	0.139	1.01	351.2	0.93	1	0.93	329.7	21.6	0.96	326.2
20.7	343.3	355.7	349.9	1.10	1.75	0.140	1.01	350.8	0.92	1	0.92	329.0	21.6	0.96	328.2
21.5	341.9	356.6	350.7	1.11	1.74	0.150	1.02	350.9	0.92	1	0.92	327.8	22.6	0.95	322.1
19.6	336.2	351.1	345.3	1.09	1.74	0.146	1.01	346.5	0.93	1	0.93	327.5	20.6	0.96	330.1
18.6	333.9	349.1	343.4	1.08	1.75	0.141	1.01	345.1	0.94	1	0.94	328.1	19.5	0.97	338.9
20.1	340.4	352.5	346.7	1.10	1.75	0.145	1.01	347.8	0.93	1	0.93	327.6	21.0	0.96	328.5
22.4	341.1	353.9	348.1	1.12	1.71	0.175	1.02	346.9	0.91	1	0.91	323.0	23.4	0.95	328.6
19.6	340.0	354.6	348.7	1.09	1.76	0.131	1.01	350.4	0.93	1	0.93	330.8	20.6	0.96	330.9
21.3	340.8	352.1	346.3	1.11	1.72	0.164	1.02	346.2	0.92	1	0.92	324.2	22.2	0.95	333.4
20.4	339.7	351.8	346.0	1.10	1.74	0.152	1.01	346.7	0.93	1	0.93	326.2	21.3	0.96	318.9
20.1	340.3	353.1	347.3	1.10	1.75	0.143	1.01	348.4	0.93	1	0.93	328.2	21.0	0.96	324.8
19.3	328.8	344.5	338.8	1.09	1.71	0.174	1.02	339.3	0.93	1	0.93	322.1	20.3	0.96	314.8
19.2	340.0	352.6	346.8	1.09	1.76	0.132	1.01	348.7	0.94	1	0.94	330.1	20.0	0.97	329.7
20.6	356.9	366.1	360.1	1.10	1.81	0.095	1.01	362.8	0.93	1	0.93	338.9	21.4	0.96	329.0
21.2	342.0	356.5	350.6	1.11	1.74	0.146	1.02	351.1	0.92	1	0.92	328.5	22.2	0.95	327.8
22.8	348.5	361.1	355.1	1.13	1.74	0.147	1.02	354.8	0.91	1	0.91	328.6	23.9	0.94	327.5
21.6	351.4	360.3	354.4	1.11	1.76	0.131	1.01	355.4	0.92	1	0.92	330.9	22.5	0.95	328.1
23.1	357.0	367.3	361.2	1.13	1.77	0.124	1.02	361.8	0.91	1	0.91	333.4	24.1	0.94	327.6

Table B.7 Flashover Voltage Using Positive Lightning Impulse Tests for Pin-post Insulator 56/57-2

h/δ [g/m ³]	U _{50%} [kV]	U _{50%/K₁} [kV]	U _{50%/K_d} [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
14.7	196.4	201.8	198.5	1.04	1.45	0.547	1.02	197.4	0.97	1	0.97	195.6	15.3	1.00	198.3
12.2	199.3	206.4	203.0	1.02	1.52	0.405	1.01	205.1	0.99	1	0.99	204.2	12.7	1.02	207.0
12.4	210.7	213.6	210.1	1.02	1.58	0.332	1.01	212.5	0.99	1	0.99	210.9	12.8	1.02	214.2
10.1	194.7	198.0	194.7	0.99	1.49	0.447	1.00	198.6	1.01	1	1.01	199.2	10.5	1.04	202.3
10.8	202.3	207.1	203.7	1.00	1.55	0.364	1.00	207.1	1.00	1	1.00	207.2	11.2	1.03	210.3
11.5	202.7	206.2	202.8	1.01	1.53	0.388	1.00	205.6	0.99	1	0.99	205.1	11.9	1.03	208.2
9.7	202.0	203.2	199.8	0.99	1.54	0.378	1.00	204.1	1.01	1	1.01	205.1	9.9	1.04	208.5
8.0	198.3	199.4	196.1	0.97	1.54	0.380	0.99	201.8	1.02	1	1.02	204.4	8.1	1.06	207.0
10.6	199.7	200.1	196.8	1.00	1.50	0.432	1.00	200.4	1.00	1	1.00	200.9	10.8	1.04	203.9
21.6	215.6	224.1	220.4	1.11	1.51	0.427	1.05	214.0	0.92	1	0.92	205.9	22.6	0.95	205.9
21.2	214.6	223.8	220.1	1.11	1.51	0.424	1.05	214.0	0.92	1	0.92	206.2	22.2	0.95	206.2
18.3	211.1	220.2	216.5	1.08	1.53	0.399	1.03	213.4	0.94	1	0.94	207.4	19.2	0.97	207.4
18.0	213.3	219.6	216.0	1.07	1.53	0.393	1.03	213.5	0.94	1	0.94	207.4	18.7	0.98	207.4
19.2	211.1	219.8	216.2	1.09	1.51	0.421	1.04	212.0	0.94	1	0.94	205.7	20.0	0.97	205.7
20.4	216.1	223.6	219.9	1.10	1.52	0.406	1.04	215.0	0.93	1	0.93	207.2	21.3	0.96	207.2
18.9	208.1	216.5	213.0	1.09	1.49	0.450	1.04	208.5	0.94	1	0.94	203.0	19.9	0.97	203.0
17.3	211.8	221.6	218.0	1.07	1.55	0.365	1.03	216.2	0.95	1	0.95	210.5	18.2	0.98	210.5
21.8	210.0	216.1	212.6	1.11	1.45	0.511	1.06	204.5	0.92	1	0.84	181.9	22.7	0.95	198.3
21.3	209.7	217.7	214.2	1.11	1.47	0.486	1.05	206.9	0.92	1	0.78	170.0	22.3	0.95	200.5
19.8	214.5	222.6	219.0	1.10	1.52	0.403	1.04	214.6	0.93	1	0.75	167.7	20.7	0.96	207.4
19.3	217.4	223.6	219.9	1.09	1.54	0.382	1.03	216.4	0.93	1	0.71	159.6	20.1	0.97	209.0
22.1	205.7	211.0	207.5	1.12	1.41	0.119	1.01	208.2	0.91	1	0.59	123.7	23.0	0.95	193.0
21.5	206.9	212.9	209.4	1.11	1.44	0.106	1.01	210.5	0.92	1	0.55	118.1	22.4	0.95	195.7
19.6	206.5	212.6	209.1	1.09	1.46	0.501	1.04	203.5	0.93	1	0.57	121.9	20.4	0.96	198.3
21.6	204.5	212.3	208.8	1.11	1.43	0.554	1.06	200.0	0.92	1	0.47	99.0	22.6	0.95	195.0
15.4	205.6	214.0	210.5	1.05	1.53	0.399	1.02	209.9	0.96	1	0.69	147.9	16.2	0.99	206.3
17.4	205.9	211.6	208.1	1.07	1.48	0.463	1.03	205.2	0.95	1	0.56	118.5	18.1	0.98	200.8

Table B.8 Flashover Voltage Using Positive Lightning Impulse Tests for Pin-post Insulator 56/57-3

h/δ [g/m ³]	U _{50%} [kV]	U _{50%/K₁} [kV]	U _{50%/K_d} [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
13.7	219.2	226.7	223.0	1.03	1.23	0.923	1.03	220.3	0.98	1	0.98	221.5	14.3	1.01	224.5
14.1	224.5	233.6	229.7	1.04	1.27	0.858	1.03	226.4	0.97	1	0.97	227.4	14.8	1.00	230.4
10.6	215.2	220.3	216.7	1.00	1.24	0.912	1.00	220.7	1.00	1	1.00	220.9	11.0	1.03	224.2
10.3	219.2	222.8	219.1	1.00	1.26	0.875	1.00	223.7	1.00	1	1.00	223.7	10.7	1.04	227.2
8.6	217.1	219.1	215.5	0.98	1.26	0.870	0.98	223.5	1.02	1	1.02	223.2	8.8	1.05	226.5
9.4	221.4	223.5	219.8	0.99	1.27	0.840	0.99	226.3	1.01	1	1.01	226.1	9.7	1.05	229.7
7.8	214.2	217.5	213.9	0.97	1.26	0.868	0.97	223.5	1.03	1	1.03	223.2	8.1	1.06	225.8
9.2	213.0	217.1	213.5	0.98	1.24	0.914	0.99	220.3	1.01	1	1.03	220.0	9.6	1.05	223.3
10.3	221.5	222.0	218.3	0.99	1.26	0.878	0.99	223.4	1.01	1	1.02	223.1	10.4	1.04	226.8
9.9	224.5	226.5	222.7	0.99	1.29	0.816	0.99	228.4	1.01	1	1.03	228.4	10.1	1.04	232.0
20.5	232.7	242.7	238.7	1.10	1.23	0.923	1.10	221.4	0.93	1	0.93	224.7	21.6	0.96	228.3
18.5	231.1	240.4	236.4	1.08	1.25	0.897	1.07	223.8	0.94	1	0.94	226.1	19.4	0.97	229.5
21.6	233.1	241.9	237.9	1.11	1.22	0.956	1.11	218.2	0.92	1	0.92	222.3	22.6	0.95	226.2
19.6	229.3	238.6	234.6	1.09	1.23	0.945	1.09	219.2	0.93	1	0.93	222.6	20.6	0.96	226.0
21.1	238.9	245.1	241.1	1.11	1.24	0.901	1.10	223.8	0.92	1	0.92	226.0	21.9	0.95	230.1
21.3	229.3	238.1	234.2	1.11	1.20	0.991	1.11	214.5	0.92	1	0.92	219.2	22.3	0.95	223.0
20.1	229.1	237.8	233.9	1.10	1.22	0.964	1.09	217.2	0.93	1	0.93	221.0	21.0	0.96	224.6
20.5	224.6	234.8	230.9	1.10	1.19	1.000	1.10	212.5	0.93	1	0.93	217.4	21.6	0.96	220.9
22.9	236.5	243.6	239.5	1.13	1.22	0.384	1.05	232.8	0.91	1	0.91	221.6	23.8	0.94	226.0
21.2	226.4	236.5	232.6	1.11	1.20	1.000	1.11	212.8	0.92	1	0.92	217.9	22.2	0.95	221.5
22.0	226.1	232.7	228.9	1.12	1.17	1.000	1.12	208.4	0.92	1	0.92	213.1	23.0	0.95	217.1
19.6	221.6	230.6	226.8	1.09	1.18	1.000	1.09	210.8	0.93	1	0.93	215.1	20.6	0.96	218.4
21.0	230.5	238.0	234.1	1.11	1.21	0.982	1.10	215.4	0.92	1	0.92	219.6	21.9	0.95	223.4
20.1	224.9	231.9	228.1	1.10	1.19	1.000	1.10	211.3	0.93	1	0.93	215.5	21.0	0.96	219.1
22.2	225.3	232.7	228.8	1.12	1.17	1.000	1.12	208.0	0.91	1	0.91	212.8	23.1	0.95	216.8
14.8	218.8	227.9	224.1	1.04	1.23	0.942	1.04	218.8	0.97	1	0.97	220.7	15.5	1.00	223.6
17.0	225.0	231.9	228.1	1.07	1.22	0.949	1.06	218.5	0.95	1	0.95	220.8	17.7	0.98	224.0

Table B.9 Flashover Voltage Using Positive Lightning Impulse Tests for Pin-post Insulator 56/57-4

h/δ [g/m ³]	U _{50%} [kV]	U _{50%/K₁} [kV]	U _{50%/K_d} [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
11.7	302.3	306.4	301.4	1.01	1.26	0.873	1.01	304.1	0.99	1	0.99	304.2	12.1	1.03	309.0
9.4	295.9	298.6	293.7	0.99	1.25	0.880	0.99	302.5	1.01	1	1.02	302.2	9.7	1.05	306.9
8.0	289.1	291.7	286.9	0.97	1.24	0.903	0.97	299.6	1.02	1	1.07	298.8	8.2	1.05	302.6
7.9	290.8	291.4	286.6	0.97	1.25	0.901	0.97	299.8	1.03	1	1.11	298.8	8.0	1.06	302.5
9.7	296.4	298.0	293.1	0.99	1.25	0.893	0.99	301.3	1.01	1	1.05	300.9	9.9	1.04	305.8
9.6	294.6	298.2	293.3	0.99	1.25	0.889	0.99	301.7	1.01	1	1.07	301.4	9.8	1.04	306.1
10.3	293.3	297.9	293.0	1.00	1.24	0.912	1.00	299.2	1.00	1	1.03	299.2	10.7	1.04	303.9
18.0	315.2	328.7	323.3	1.08	1.26	0.863	1.07	308.2	0.94	1	0.94	310.5	18.9	0.97	314.9
20.2	317.5	331.2	325.7	1.10	1.25	0.899	1.09	303.8	0.93	1	0.93	307.4	21.2	0.96	312.3
21.5	328.7	338.1	332.5	1.11	1.26	0.870	1.10	308.5	0.92	1	0.92	310.8	22.4	0.95	316.5
21.8	328.1	337.5	331.9	1.11	1.25	0.880	1.10	306.9	0.92	1	0.92	309.6	22.7	0.95	315.4
15.4	307.1	319.1	313.8	1.05	1.26	0.874	1.04	305.7	0.96	1	0.96	307.5	16.2	0.99	311.6
16.7	312.9	323.6	318.2	1.06	1.26	0.867	1.05	306.9	0.95	1	0.95	308.7	17.5	0.98	313.0
16.4	311.1	321.8	316.5	1.06	1.26	0.876	1.05	305.8	0.96	1	0.96	307.7	17.2	0.99	311.9
16.3	314.7	323.3	318.0	1.06	1.27	0.857	1.05	308.1	0.96	1	0.96	309.3	17.0	0.99	313.8
18.5	318.1	329.0	323.6	1.08	1.26	0.872	1.07	307.2	0.94	1	0.94	309.4	19.4	0.97	314.0

Table B.10 Flashover Voltage Using Negative Lightning Impulse Tests for Pin-post Insulator 56/57-2

h/δ [g/m ³]	U _{50%} [kV]	U _{50%/K₁} [kV]	U _{50%/K_d} [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
13.9	246.6	253.4	249.2	1.03	1.84	0.073	1.00	252.8	0.98	1	0.98	247.2	14.5	1.01	250.7
14.4	243.0	252.9	248.7	1.04	1.82	0.085	1.00	252.0	0.97	1	0.97	245.6	15.2	1.00	248.8
12.4	247.5	250.9	246.8	1.02	1.85	0.065	1.00	250.7	0.99	1	0.99	247.8	12.8	1.02	251.6
10.8	244.8	250.7	246.5	1.00	1.88	0.050	1.00	250.7	1.00	1	1.00	250.8	11.2	1.03	254.5
11.5	248.0	252.2	248.1	1.01	1.88	0.050	1.00	252.2	0.99	1	0.99	250.9	11.9	1.03	254.8
9.5	246.4	251.9	247.8	0.99	1.91	0.032	1.00	252.0	1.01	1	1.01	254.8	9.9	1.04	258.6
10.4	250.3	250.9	246.7	0.99	1.89	0.043	1.00	250.9	1.00	1	1.00	251.7	10.6	1.04	256.0
9.8	248.7	251.8	247.6	0.99	1.91	0.034	1.00	251.9	1.01	1	1.01	254.0	10.1	1.04	258.0
20.7	258.5	267.9	263.4	1.10	1.82	0.088	1.01	265.5	0.92	1	0.92	247.7	21.6	0.96	251.9
19.9	255.2	266.1	261.7	1.10	1.82	0.088	1.01	264.0	0.93	1	0.93	247.7	20.9	0.96	251.5
21.5	251.5	262.3	258.0	1.11	1.76	0.117	1.01	259.0	0.92	1	0.92	241.2	22.6	0.95	245.3
18.9	254.3	265.3	260.9	1.09	1.83	0.081	1.01	263.5	0.94	1	0.94	248.7	19.9	0.97	252.4
19.2	252.3	262.6	258.3	1.09	1.81	0.096	1.01	260.5	0.94	1	0.94	245.8	20.0	0.97	249.6
18.3	248.4	259.8	255.5	1.08	1.80	0.101	1.01	257.7	0.94	1	0.94	244.7	19.2	0.97	248.3
21.0	253.3	262.2	257.9	1.11	1.77	0.120	1.01	259.0	0.92	1	0.92	242.0	21.9	0.95	246.2
18.9	252.6	262.7	258.4	1.09	1.81	0.099	1.01	260.6	0.94	1	0.94	246.3	19.9	0.97	250.0
17.3	249.9	261.5	257.2	1.07	1.83	0.079	1.01	260.1	0.95	1	0.95	248.4	18.2	0.98	251.7
21.5	252.7	260.2	255.9	1.11	1.75	0.137	1.01	256.4	0.92	1	0.92	239.2	22.4	0.95	243.5
21.3	255.4	265.1	260.8	1.11	1.79	0.109	1.01	262.1	0.92	1	0.92	244.2	22.3	0.95	248.4
19.0	253.1	261.9	257.6	1.09	1.81	0.096	1.01	259.8	0.94	1	0.94	245.4	19.8	0.97	249.3
20.1	252.8	260.9	256.6	1.10	1.78	0.116	1.01	258.1	0.93	1	0.93	242.3	21.0	0.96	246.3
22.4	255.5	262.0	257.7	1.12	1.75	0.138	1.02	257.9	0.91	1	0.91	239.2	23.3	0.95	243.9
22.6	254.6	262.1	257.7	1.12	1.75	0.142	1.02	257.8	0.91	1	0.91	238.9	23.5	0.95	243.6
22.1	255.1	261.5	257.2	1.12	1.75	0.137	1.02	257.6	0.91	1	0.91	239.3	23.0	0.95	243.9
22.0	251.7	259.1	254.8	1.12	1.74	0.151	1.02	254.8	0.92	1	0.92	237.2	23.0	0.95	241.7
20.7	255.0	262.5	258.2	1.10	1.78	0.113	1.01	259.6	0.93	1	0.93	242.8	21.5	0.96	247.0
19.9	248.2	255.6	251.4	1.09	1.75	0.142	1.01	252.4	0.93	1	0.93	238.0	20.7	0.96	241.9

Table B.11 Flashover Voltage Using Negative Lightning Impulse Tests for Pin-post Insulator 56/57-3

h/δ [g/m ³]	U _{50%} [kV]	U _{50%/K₁} [kV]	U _{50%/K_d} [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
13.5	280.0	288.7	283.9	1.03	1.58	0.280	1.01	286.4	0.98	1	0.98	282.5	14.1	1.01	286.3
14.1	276.7	287.9	283.2	1.04	1.56	0.352	1.01	284.3	0.97	1	0.97	280.4	14.8	1.00	284.0
10.8	270.1	276.5	271.9	1.00	1.55	0.363	1.00	276.4	1.00	1	1.00	276.6	11.2	1.03	280.8
10.3	279.7	284.4	279.7	1.00	1.61	0.293	1.00	284.8	1.00	1	1.00	285.6	10.7	1.04	290.1
8.2	277.0	279.4	274.8	0.97	1.61	0.283	0.99	281.6	1.02	1	1.02	285.7	8.4	1.05	289.6
9.4	273.4	275.9	271.4	0.99	1.57	0.335	1.00	277.3	1.01	1	1.01	279.2	9.7	1.05	283.6
7.6	274.0	278.3	273.7	0.97	1.62	0.279	0.99	280.9	1.03	1	1.03	286.1	7.8	1.06	289.2
8.0	273.6	275.1	270.6	0.97	1.59	0.309	0.99	277.7	1.02	1	1.02	281.9	8.1	1.06	285.5
9.5	270.8	276.0	271.4	0.99	1.57	0.337	1.00	277.2	1.01	1	1.01	279.2	9.8	1.04	283.4
10.4	278.0	278.6	274.0	0.99	1.57	0.333	1.00	279.1	1.00	1	1.00	279.6	10.6	1.04	284.3
9.9	282.3	284.8	280.1	0.99	1.62	0.279	1.00	285.6	1.01	1	1.01	287.2	10.1	1.04	291.8
21.6	288.7	299.5	294.6	1.11	1.51	0.421	1.05	286.2	0.92	1	0.92	275.2	22.6	0.95	280.0
19.9	289.7	301.3	296.4	1.10	1.54	0.375	1.04	291.1	0.93	1	0.93	280.4	20.9	0.96	284.8
21.4	287.2	294.7	289.9	1.11	1.49	0.448	1.05	281.4	0.92	1	0.92	271.2	22.2	0.95	276.2
21.0	292.2	303.5	298.5	1.11	1.54	0.381	1.04	291.9	0.92	1	0.92	280.1	22.0	0.95	284.8
21.2	287.3	299.2	294.3	1.11	1.51	0.417	1.04	286.4	0.92	1	0.92	275.7	22.2	0.95	280.3
19.3	287.2	297.1	292.2	1.09	1.53	0.391	1.03	287.4	0.94	1	0.94	277.9	20.1	0.97	282.3
22.6	294.1	302.9	297.9	1.12	1.52	0.414	1.05	288.8	0.91	1	0.91	276.2	23.5	0.95	281.6
20.9	286.8	299.5	294.6	1.11	1.52	0.409	1.04	287.2	0.92	1	0.92	276.7	21.9	0.95	281.2
22.0	292.7	301.3	296.3	1.12	1.52	0.415	1.05	287.8	0.92	1	0.92	275.8	23.0	0.95	281.0
21.1	292.6	300.1	295.2	1.11	1.52	0.402	1.04	288.2	0.92	1	0.92	276.7	21.9	0.95	281.8
20.7	287.9	296.3	291.4	1.10	1.51	0.424	1.04	284.2	0.93	1	0.93	274.1	21.5	0.96	278.8
19.6	288.6	300.3	295.3	1.09	1.54	0.377	1.03	290.3	0.93	1	0.93	280.1	20.6	0.96	284.5
20.7	283.5	292.7	287.9	1.10	1.49	0.453	1.05	279.9	0.92	1	0.92	270.7	21.6	0.96	275.3
20.7	292.0	301.2	296.2	1.10	1.53	0.389	1.04	289.8	0.93	1	0.93	278.6	21.5	0.96	283.4
23.4	291.9	300.5	295.5	1.13	1.49	0.448	1.06	284.4	0.91	1	0.91	272.2	24.3	0.94	278.1
21.3	291.4	302.2	297.2	1.11	1.53	0.396	1.04	289.9	0.92	1	0.92	278.2	22.3	0.95	283.0

Table B.12 Flashover Voltage Using Negative Lightning Impulse Tests for Pin-post Insulator 56/57-4

h/δ [g/m ³]	U _{50%} [kV]	U _{50%/K₁} [kV]	U _{50%/K_d} [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
11.7	302.3	306.4	301.4	1.01	1.26	0.873	1.01	304.1	0.99	1	0.99	304.2	12.1	1.03	309.0
9.4	295.9	298.6	293.7	0.99	1.25	0.880	0.99	302.5	1.01	1	1.01	302.2	9.7	1.05	306.9
8.0	289.1	291.7	286.9	0.97	1.24	0.903	0.97	299.6	1.02	1	1.02	298.8	8.2	1.05	302.6
7.9	290.8	291.4	286.6	0.97	1.25	0.901	0.97	299.8	1.03	1	1.03	298.8	8.0	1.06	302.5
9.7	296.4	298.0	293.1	0.99	1.25	0.893	0.99	301.3	1.01	1	1.01	300.9	9.9	1.04	305.8
9.6	294.6	298.2	293.3	0.99	1.25	0.889	0.99	301.7	1.01	1	1.01	301.4	9.8	1.04	306.1
10.3	293.3	297.9	293.0	1.00	1.24	0.912	1.00	299.2	1.00	1	1.00	299.2	10.7	1.04	303.9
18.0	315.2	328.7	323.3	1.08	1.26	0.863	1.07	308.2	0.94	1	0.94	310.5	18.9	0.97	314.9
20.2	317.5	331.2	325.7	1.10	1.25	0.899	1.09	303.8	0.93	1	0.93	307.4	21.2	0.96	312.3
21.5	328.7	338.1	332.5	1.11	1.26	0.870	1.10	308.5	0.92	1	0.92	310.8	22.4	0.95	316.5
21.8	328.1	337.5	331.9	1.11	1.25	0.880	1.10	306.9	0.92	1	0.92	309.6	22.7	0.95	315.4
15.4	307.1	319.1	313.8	1.05	1.26	0.874	1.04	305.7	0.96	1	0.96	307.5	16.2	0.99	311.6
16.7	312.9	323.6	318.2	1.06	1.26	0.867	1.05	306.9	0.95	1	0.95	308.7	17.5	0.98	313.0
16.4	311.1	321.8	316.5	1.06	1.26	0.876	1.05	305.8	0.96	1	0.96	307.7	17.2	0.99	311.9
16.3	314.7	323.3	318.0	1.06	1.27	0.857	1.05	308.1	0.96	1	0.96	309.3	17.0	0.99	313.8
18.5	318.1	329.0	323.6	1.08	1.26	0.872	1.07	307.2	0.94	1	0.94	309.4	19.4	0.97	314.0

Table B.13 Flashover Voltage Using AC Voltage Tests for Pin-post Insulator 57-2

h/δ [g/m ³]	U _{ave} [kV]	U _{ave} /K ₁ [kV]	U _{ave} /K _d [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
14.4	130.1	135.1	132.8	1.05	1.07	1.00	1.05	128.9	0.97	1	0.97	131.2	13.4	1.01	134.7
14.4	131.0	136.1	133.8	1.05	1.08	1.00	1.05	129.8	0.97	1	0.97	132.2	13.4	1.01	135.8
11.4	123.4	125.9	123.8	1.01	1.04	1.00	1.01	124.9	1.00	1	1.00	125.3	10.9	1.04	128.2
9.9	128.1	128.8	126.7	0.99	1.08	1.00	0.99	130.5	1.01	1	1.01	129.9	9.6	1.05	132.5
9.9	126.8	127.5	125.4	0.99	1.07	1.00	0.99	129.2	1.01	1	1.01	128.6	9.6	1.05	131.2
21.8	132.5	138.2	135.9	1.10	1.05	1.00	1.10	126.0	0.92	1	0.92	126.7	20.2	0.97	131.2
19.0	130.9	135.5	133.3	1.08	1.04	1.00	1.08	125.8	0.94	1	0.94	127.0	17.8	0.98	130.8
17.8	132.7	137.1	134.9	1.07	1.06	1.00	1.07	128.2	0.95	1	0.95	129.7	16.7	0.99	133.4
23.1	141.0	146.2	143.7	1.10	1.10	1.00	1.10	132.3	0.91	1	0.91	132.7	21.5	0.96	137.6
22.5	140.2	145.3	142.9	1.10	1.10	1.00	1.10	132.1	0.91	1	0.91	132.6	21.0	0.96	137.3
21.0	138.6	142.8	140.4	1.09	1.09	1.00	1.09	131.0	0.92	1	0.92	131.8	19.8	0.97	135.9
21.9	139.5	144.3	141.9	1.10	1.09	1.00	1.10	131.7	0.92	1	0.92	132.3	20.5	0.96	136.7
21.6	135.0	139.6	137.3	1.09	1.06	1.00	1.09	127.6	0.92	1	0.92	128.2	20.2	0.97	132.5
21.6	133.8	137.6	135.3	1.09	1.04	1.00	1.09	125.8	0.92	1	0.92	126.4	20.5	0.96	130.3
21.6	134.2	138.0	135.7	1.09	1.05	1.00	1.09	126.2	0.92	1	0.92	126.7	20.5	0.96	130.7
22.2	137.0	142.2	139.8	1.10	1.07	1.00	1.10	129.4	0.91	1	0.91	130.0	20.7	0.96	134.6
14.8	123.0	127.8	125.7	1.05	1.01	1.00	1.05	121.7	0.97	1	0.97	123.8	13.7	1.01	127.2
16.4	128.9	133.7	131.5	1.06	1.05	1.00	1.06	126.1	0.96	1	0.96	127.9	15.2	1.00	131.5
20.5	129.2	134.5	132.3	1.09	1.03	0.98	1.09	123.7	0.93	1	0.93	124.6	19.0	0.97	128.8
21.5	132.8	138.0	135.8	1.09	1.05	1.00	1.09	126.1	0.92	1	0.92	126.9	19.9	0.97	131.3
22.5	138.3	143.2	140.9	1.10	1.08	1.00	1.10	130.2	0.91	1	0.91	130.7	21.0	0.96	135.3
22.2	132.0	137.2	135.0	1.10	1.04	0.99	1.10	125.0	0.91	1	0.91	125.6	20.5	0.96	130.1
17.8	132.7	136.9	134.7	1.07	1.06	1.00	1.07	128.1	0.95	1	0.95	129.5	16.7	0.99	133.2
17.3	132.5	132.2	130.0	1.07	1.03	1.00	1.07	123.9	0.95	1	0.95	125.5	16.0	0.99	129.2
21.8	130.9	129.1	127.0	1.06	1.05	1.00	1.06	121.7	0.96	1	0.96	123.5	15.2	1.00	127.0
19.0	132.7	138.2	135.9	1.10	1.04	1.00	1.10	126.0	0.92	1	0.92	126.7	20.2	0.97	131.2
17.8	141.0	135.5	133.3	1.08	1.06	1.00	1.08	125.8	0.94	1	0.94	127.0	17.8	0.98	130.8

Table B.14 Flashover Voltage Using AC Voltage Tests for Pin-post Insulator 57-3

h/δ [g/m ³]	U _{ave} [kV]	U _{ave} /K ₁ [kV]	U _{ave} /K _d [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
14.4	139.1	143.2	142.1	1.05	0.89	0.762	1.04	138.2	0.97	1	0.97	140.4	13.4	1.01	144.2
11.5	137.4	139.2	137.4	1.01	0.89	0.770	1.01	138.3	0.99	1	0.99	139.0	11.0	1.03	142.1
11.4	138.0	140.2	138.5	1.01	0.90	0.784	1.01	139.3	1.00	1	1.00	140.2	10.9	1.04	143.4
9.9	135.6	136.5	134.5	0.99	0.89	0.770	0.99	137.9	1.01	1	1.01	138.0	9.5	1.05	140.8
19.9	148.0	151.4	150.2	1.08	0.91	0.802	1.07	142.1	0.93	1	0.93	142.1	18.8	0.97	146.4
20.7	145.1	148.8	147.9	1.09	0.89	0.764	1.07	139.4	0.92	1	0.92	139.0	19.4	0.97	143.5
18.8	147.8	152.0	150.9	1.08	0.92	0.820	1.06	143.0	0.94	1	0.94	143.9	17.6	0.98	148.3
18.6	142.1	146.5	145.9	1.08	0.89	0.761	1.06	138.6	0.94	1	0.94	139.4	17.2	0.99	143.8
20.5	146.5	151.0	150.0	1.09	0.90	0.790	1.07	141.2	0.93	1	0.93	141.3	19.0	0.97	146.0
20.0	145.7	150.8	150.1	1.09	0.90	0.796	1.07	141.3	0.93	1	0.93	141.9	18.4	0.98	146.7
21.0	149.6	153.0	151.6	1.09	0.91	0.807	1.07	142.8	0.92	1	0.92	142.3	19.8	0.97	146.8
21.9	145.8	149.7	148.9	1.10	0.89	0.763	1.07	139.5	0.92	1	0.92	138.7	20.4	0.96	143.5
22.2	147.1	151.0	150.2	1.10	0.89	0.775	1.08	140.4	0.91	1	0.91	139.6	20.7	0.96	144.5
14.8	140.5	144.5	143.4	1.05	0.89	0.773	1.04	139.2	0.97	1	0.97	141.2	13.7	1.01	145.1
20.5	142.2	146.3	145.7	1.09	0.88	0.739	1.06	137.4	0.93	1	0.93	137.2	19.0	0.97	141.8
22.2	146.9	150.9	150.1	1.10	0.89	0.775	1.08	140.3	0.91	1	0.91	139.6	20.5	0.96	144.7
21.9	144.3	147.6	146.7	1.10	0.88	0.739	1.07	137.9	0.92	1	0.92	136.7	20.4	0.96	141.5
19.9	144.5	148.7	147.9	1.08	0.89	0.772	1.06	139.7	0.93	1	0.93	139.9	18.4	0.98	144.5
17.5	143.8	147.2	146.0	1.07	0.89	0.776	1.05	140.0	0.95	1	0.95	140.7	16.5	0.99	144.6
14.8	136.3	140.1	139.3	1.05	0.87	0.723	1.04	135.2	0.97	1	0.97	137.2	13.7	1.01	140.9

Table B.15 Flashover Voltage Using AC Voltage Tests for Pin-post Insulator 57-4

h/δ [g/m ³]	U _{ave} [kV]	U _{ave} /K ₁ [kV]	U _{ave} /K _d [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
14.4	162.2	166.9	165.8	1.05	0.87	0.736	1.04	161.2	0.97	1	0.97	163.7	13.4	1.01	168.2
11.7	159.3	161.3	159.4	1.01	0.87	0.731	1.01	160.0	0.99	1	0.99	160.9	11.3	1.03	164.5
11.4	159.7	162.1	160.2	1.01	0.88	0.744	1.01	161.1	1.00	1	1.00	162.1	10.9	1.04	165.9
9.7	158.6	159.6	157.3	0.98	0.88	0.754	0.99	161.5	1.01	1	1.01	161.6	9.3	1.05	164.8
21.8	159.7	163.7	163.8	1.14	0.79	0.589	1.08	151.5	0.92	1	0.92	152.7	20.2	0.97	158.1
22.5	163.5	167.5	167.1	1.15	0.80	0.622	1.09	153.6	0.91	1	0.91	155.0	21.0	0.96	160.5
20.3	165.3	168.5	167.4	1.12	0.83	0.655	1.08	156.5	0.93	1	0.93	157.8	19.3	0.97	162.5
20.3	160.0	162.7	161.8	1.12	0.80	0.607	1.07	152.0	0.93	1	0.93	152.6	19.3	0.97	157.2
19.3	164.1	167.6	166.5	1.11	0.83	0.672	1.07	156.5	0.93	1	0.93	158.3	18.2	0.98	162.9
20.7	164.1	168.0	167.4	1.13	0.82	0.646	1.08	155.6	0.92	1	0.92	157.4	19.4	0.97	162.4
18.0	167.3	171.3	169.8	1.09	0.86	0.761	1.07	160.4	0.94	1	0.94	163.1	17.0	0.99	167.6
18.8	167.7	172.2	171.2	1.10	0.86	0.705	1.07	160.7	0.94	1	0.94	163.4	17.6	0.98	168.3
17.7	161.9	166.7	166.2	1.09	0.84	0.677	1.06	157.3	0.95	1	0.95	160.0	16.3	0.99	164.8
18.2	167.1	171.5	170.4	1.09	0.86	0.709	1.07	160.8	0.94	1	0.94	163.3	17.0	0.99	168.2
22.0	167.2	170.4	169.4	1.14	0.82	0.637	1.09	156.7	0.92	1	0.92	157.7	20.8	0.96	162.9
19.9	162.5	166.8	166.5	1.12	0.82	0.642	1.07	155.4	0.93	1	0.93	157.5	18.4	0.98	162.7
18.9	162.7	167.4	167.1	1.11	0.84	0.662	1.07	156.7	0.94	1	0.94	159.3	17.5	0.98	164.3
21.0	165.3	168.4	167.4	1.13	0.82	0.637	1.08	156.1	0.92	1	0.92	157.1	19.8	0.97	162.1
21.6	163.4	166.7	166.0	1.14	0.81	0.614	1.08	154.2	0.92	1	0.92	155.1	20.2	0.97	160.2
20.4	164.7	167.8	166.8	1.12	0.82	0.641	1.08	156.1	0.93	1	0.93	157.2	19.3	0.97	162.1
22.6	170.0	173.7	172.6	1.15	0.83	0.679	1.10	158.2	0.91	1	0.91	160.0	21.3	0.96	165.4
21.0	160.4	163.3	162.6	1.13	0.80	0.595	1.07	152.1	0.92	1	0.92	152.6	19.8	0.97	157.4
21.9	161.0	163.6	162.8	1.14	0.79	0.584	1.08	151.7	0.92	1	0.92	151.7	20.8	0.96	156.5
22.2	162.3	166.0	165.8	1.14	0.80	0.600	1.08	153.1	0.91	1	0.91	154.1	20.7	0.96	159.5
15.4	159.7	164.3	163.4	1.06	0.85	0.706	1.04	157.6	0.96	1	0.96	160.2	14.3	1.01	164.6
14.4	154.6	158.5	157.9	1.05	0.83	0.659	1.03	153.7	0.97	1	0.97	155.9	13.4	1.01	160.2
20.5	161.5	165.7	165.4	1.12	0.81	0.623	1.08	154.0	0.93	1	0.93	155.8	19.0	0.97	161.0

Table B.16 Flashover Voltage Using AC Voltage Tests for Pin-post Insulator 56/57-2

h/δ [g/m ³]	U _{ave} [kV]	U _{ave} /K ₁ [kV]	U _{ave} /K _d [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
14.4	137.5	142.8	140.4	1.05	1.02	1.00	1.05	136.2	0.97	1	0.97	138.7	13.4	1.01	142.4
11.6	134.2	137.4	135.1	1.01	1.02	1.00	1.01	136.0	0.99	1	0.99	136.6	11.0	1.03	139.8
11.4	127.7	130.1	128.1	1.01	0.97	0.93	1.01	129.1	1.00	1	1.00	129.7	10.9	1.04	132.6
9.9	129.9	130.6	128.5	0.99	0.99	0.98	0.99	132.3	1.01	1	1.01	131.7	9.6	1.05	134.4
10.3	133.3	134.5	132.2	0.99	1.01	1.00	0.99	135.5	1.00	1	1.00	135.1	9.9	1.04	138.0
10.3	140.8	141.6	139.3	0.99	1.07	1.00	0.99	142.7	1.00	1	1.00	142.3	10.0	1.04	145.2
20.7	141.6	145.8	143.6	1.12	0.97	0.94	1.12	130.6	0.93	1	0.93	135.1	19.5	0.97	139.3
20.4	137.4	141.9	140.1	1.12	0.95	0.89	1.11	128.0	0.93	1	0.93	132.0	19.2	0.97	136.2
19.2	139.3	144.4	142.3	1.11	0.98	0.95	1.10	131.1	0.94	1	0.94	135.4	17.8	0.98	139.6
18.2	136.3	141.0	139.0	1.10	0.97	0.93	1.09	129.6	0.94	1	0.94	133.3	17.0	0.99	137.2
17.3	136.3	141.9	139.8	1.09	0.98	0.96	1.08	131.2	0.95	1	0.95	134.9	16.0	0.99	138.9
18.9	139.7	145.1	142.9	1.10	0.99	0.97	1.10	131.8	0.94	1	0.94	136.2	17.5	0.98	140.5
22.5	140.8	145.5	143.6	1.15	0.95	0.90	1.13	128.6	0.91	1	0.91	133.3	21.0	0.96	138.0
19.9	135.6	140.8	139.1	1.12	0.95	0.89	1.10	127.6	0.93	1	0.93	131.6	18.4	0.98	135.9
21.2	141.0	144.8	142.8	1.13	0.96	0.92	1.12	129.4	0.92	1	0.92	133.7	20.0	0.97	138.0
20.4	136.1	139.6	137.9	1.12	0.94	0.86	1.10	126.6	0.93	1	0.93	129.9	19.3	0.97	133.9
21.8	144.4	148.7	146.5	1.14	0.98	0.96	1.13	131.5	0.92	1	0.92	136.6	20.6	0.96	141.1
22.7	138.5	142.6	141.0	1.15	0.93	0.85	1.13	126.5	0.91	1	0.91	130.5	21.3	0.96	135.1
22.5	139.6	144.3	142.6	1.15	0.95	0.88	1.13	127.8	0.91	1	0.91	132.3	21.0	0.96	137.0
15.4	134.3	139.6	137.4	1.06	0.99	0.97	1.06	131.8	0.96	1	0.96	134.7	14.3	1.01	138.4
16.1	133.6	137.8	135.8	1.07	0.97	0.93	1.06	129.6	0.96	1	0.96	132.4	15.0	1.00	136.0
20.9	135.1	139.9	138.4	1.13	0.93	0.86	1.11	126.1	0.92	1	0.92	130.0	19.3	0.97	134.4
21.8	137.7	142.5	140.9	1.14	0.94	0.87	1.12	127.1	0.92	1	0.92	131.4	20.2	0.97	136.0
20.5	137.4	142.1	140.3	1.12	0.95	0.89	1.11	128.0	0.93	1	0.93	132.1	19.0	0.97	136.5
18.2	137.2	142.0	139.9	1.09	0.97	0.94	1.09	130.4	0.94	1	0.94	134.1	17.0	0.99	138.1
14.8	141.6	136.9	134.9	1.05	0.98	0.95	1.05	130.5	0.97	1	0.97	132.9	13.7	1.01	136.6
20.7	137.4	145.8	143.6	1.12	0.97	0.94	1.12	130.6	0.93	1	0.93	135.1	19.5	0.97	139.3

Table B.17 Flashover Voltage Using AC Voltage Tests for Pin-post Insulator 56/57-3

h/δ [g/m ³]	U _{ave} [kV]	U _{ave} /K ₁ [kV]	U _{ave} /K _d [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
14.1	151.2	155.1	154.5	1.04	0.85	0.681	1.03	150.7	0.97	1	0.97	152.9	13.1	1.02	157.1
11.7	151.3	153.5	151.9	1.01	0.86	0.706	1.01	152.3	0.99	1	0.99	153.4	11.2	1.03	156.9
9.9	152.8	153.4	151.1	0.99	0.87	0.736	0.99	154.9	1.01	1	1.01	154.9	9.6	1.05	158.0
10.1	148.2	149.1	147.0	0.99	0.85	0.687	0.99	150.1	1.01	1	1.01	150.5	9.7	1.04	153.6
8.0	142.5	144.7	143.4	0.97	0.85	0.687	0.98	148.2	1.02	1	1.02	149.3	7.6	1.06	151.6
9.9	155.9	156.1	153.6	0.99	0.89	0.766	0.99	157.7	1.01	1	1.01	157.5	9.6	1.05	160.6
17.9	150.2	153.6	153.3	1.07	0.82	0.631	1.04	147.1	0.94	1	0.94	147.3	16.7	0.99	151.6
17.3	148.4	152.2	152.2	1.07	0.81	0.626	1.04	146.1	0.95	1	0.95	146.9	16.0	0.99	151.3
22.9	160.5	163.5	162.7	1.10	0.84	0.679	1.07	153.1	0.91	1	0.91	150.5	21.6	0.96	155.7
21.9	159.4	163.1	162.6	1.10	0.85	0.685	1.07	153.1	0.92	1	0.92	151.6	20.4	0.96	156.8
22.2	157.4	160.5	159.9	1.10	0.83	0.657	1.06	150.9	0.91	1	0.91	148.7	20.8	0.96	153.8
21.9	157.8	161.3	160.9	1.10	0.84	0.669	1.06	151.7	0.92	1	0.92	149.9	20.4	0.96	155.1
20.4	156.7	159.5	158.6	1.09	0.83	0.662	1.06	151.0	0.93	1	0.93	149.5	19.3	0.97	154.1
22.5	154.8	158.2	158.0	1.10	0.82	0.636	1.06	148.8	0.91	1	0.91	146.6	21.0	0.96	151.8
15.4	149.7	153.6	153.2	1.05	0.83	0.654	1.04	148.4	0.96	1	0.96	150.2	14.3	1.01	154.3
14.8	148.5	152.3	151.9	1.05	0.83	0.646	1.03	147.5	0.97	1	0.97	149.6	13.7	1.01	153.7
16.4	152.4	155.7	155.0	1.06	0.83	0.662	1.04	149.8	0.96	1	0.96	150.6	15.3	1.00	154.8
20.9	153.5	157.3	157.3	1.09	0.82	0.643	1.06	148.8	0.92	1	0.92	147.7	19.3	0.97	152.8
21.5	152.7	156.3	156.3	1.09	0.82	0.628	1.06	147.6	0.92	1	0.92	146.1	19.9	0.97	151.2
22.2	158.3	162.0	161.7	1.10	0.84	0.674	1.07	152.1	0.91	1	0.91	150.4	20.5	0.96	155.8
18.6	151.2	154.8	154.7	1.08	0.82	0.638	1.05	147.8	0.94	1	0.94	147.8	17.2	0.99	152.4
18.9	152.0	155.6	155.4	1.08	0.82	0.642	1.05	148.3	0.94	1	0.94	148.1	17.5	0.98	152.8
20.5	151.9	155.2	155.0	1.09	0.81	0.625	1.05	147.2	0.93	1	0.93	145.9	19.0	0.97	150.9
17.6	155.8	159.6	158.9	1.07	0.85	0.689	1.05	152.5	0.95	1	0.95	153.0	16.4	0.99	157.5
17.9	150.2	153.6	153.3	1.07	0.82	0.631	1.04	147.1	0.94	1	0.94	147.3	16.7	0.99	151.6
17.3	148.4	152.2	152.2	1.07	0.81	0.626	1.04	146.1	0.95	1	0.95	146.9	16.0	0.99	151.3
22.9	160.5	163.5	162.7	1.10	0.84	0.679	1.07	153.1	0.91	1	0.91	150.5	21.6	0.96	155.7

Table B.18 Flashover Voltage Using AC Voltage Tests for Pin-post Insulator 56/57-4

h/δ [g/m ³]	U _{ave} [kV]	U _{ave} /K ₁ [kV]	U _{ave} /K _d [kV]	IEC 60060-1: 1989/IEEE4: 1995					IEEE4 Amendment 1 Std4a: 2001				ANSI C29.1: 1988		
				k	g	w	K ₂	U _n	k	w	K _h	U _n	Vapor Pressure [mmHg]	K _h	U _n
14.4	166.1	168.8	169.8	1.05	0.68	0.411	1.02	165.6	0.97	1	0.97	167.7	13.4	1.01	172.3
14.1	164.9	167.5	168.5	1.04	0.68	0.407	1.02	164.6	0.97	1	0.97	166.8	13.1	1.02	171.3
11.6	165.7	167.4	166.9	1.01	0.70	0.430	1.00	166.7	0.99	1	0.99	168.7	11.0	1.03	172.6
11.7	164.2	165.6	164.8	1.01	0.69	0.417	1.00	164.9	0.99	1	0.99	166.5	11.2	1.03	170.3
12.1	165.5	167.0	166.4	1.02	0.69	0.421	1.01	165.9	0.99	1	0.99	167.5	11.5	1.03	171.4
9.9	166.8	167.2	165.0	0.99	0.70	0.460	0.99	168.2	1.01	1	1.01	169.1	9.6	1.05	172.5
9.7	167.7	168.4	166.4	0.98	0.71	0.466	0.99	169.6	1.01	1	1.01	170.9	9.3	1.05	174.4
8.0	156.8	158.2	157.6	0.97	0.69	0.418	0.99	160.5	1.02	1	1.02	164.2	7.6	1.06	166.7
8.0	162.2	163.9	163.2	0.97	0.71	0.454	0.98	166.5	1.02	1	1.02	170.0	7.6	1.06	172.5
10.3	169.4	169.6	166.9	0.99	0.71	0.552	1.00	170.4	1.01	1	1.01	170.6	10.0	1.04	174.1
21.3	176.8	179.5	180.7	1.04	0.73	0.481	1.02	175.8	0.92	1	0.92	169.2	19.8	0.97	174.9
17.3	167.0	169.7	171.3	1.02	0.71	0.449	1.01	168.2	0.95	1	0.95	165.3	16.0	0.99	170.2
18.6	174.9	177.8	178.9	1.03	0.73	0.489	1.01	175.4	0.94	1	0.94	171.0	17.2	0.99	176.3
21.6	171.3	173.0	173.2	1.05	0.70	0.434	1.02	169.7	0.92	1	0.92	161.7	20.5	0.96	166.8
22.5	169.7	171.9	173.3	1.05	0.69	0.427	1.02	168.2	0.91	1	0.91	160.8	21.0	0.96	166.5
22.5	169.1	171.3	172.7	1.05	0.69	0.424	1.02	167.6	0.91	1	0.91	160.2	21.0	0.96	165.9
14.4	166.1	168.8	169.8	1.00	0.72	0.460	1.00	168.8	0.97	1	0.97	167.7	13.4	1.01	172.3
16.7	168.0	170.2	170.9	1.01	0.71	0.451	1.01	169.1	0.95	1	0.95	165.7	15.6	1.00	170.4
20.9	171.0	173.6	175.2	1.04	0.71	0.449	1.02	170.4	0.92	1	0.92	164.5	19.3	0.97	170.1
21.2	172.0	174.6	176.2	1.04	0.71	0.453	1.02	171.2	0.92	1	0.92	165.1	19.6	0.97	170.8
21.8	176.7	179.4	180.6	1.05	0.73	0.476	1.02	175.4	0.92	1	0.84	168.3	20.2	0.97	174.3
18.6	166.6	169.1	170.5	1.03	0.70	0.435	1.01	167.1	0.94	1	0.83	162.9	17.2	0.99	168.0
20.2	171.7	174.1	175.2	1.04	0.71	0.454	1.02	171.2	0.93	1	0.74	165.4	18.7	0.98	170.9
17.6	171.0	173.5	174.2	1.02	0.72	0.466	1.01	171.8	0.95	1	0.76	167.7	16.4	0.99	172.6
18.0	172.0	174.7	175.9	1.02	0.72	0.474	1.01	172.8	0.94	1	0.71	169.0	16.6	0.99	174.1
21.3	176.8	179.5	180.7	1.04	0.73	0.481	1.02	175.8	0.92	1	0.92	169.2	19.8	0.97	174.9
17.3	167.0	169.7	171.3	1.02	0.71	0.449	1.01	168.2	0.95	1	0.95	165.3	16.0	0.99	170.2

Table C.1 Flashover voltage data correction of Positive lightning impulse by using New set humidity Correction factor

Line-Post Insulator Class 57-2						Line-Post Insulator Class 57-3						Line-Post Insulator Class 57-4					
h/δ [g/m ³]	$U_{50\%/K_1}$ [kV]	k'	g	w	$\frac{U_{50\%}}{(K_1)(k')^w}$	h/δ [g/m ³]	$U_{50\%/K_1}$ [kV]	k'	g	w	$\frac{U_{50\%}}{(K_1)(k')^w}$	h/δ [g/m ³]	$U_{50\%/K_1}$ [kV]	k'	g	w	$\frac{U_{50\%}}{(K_1)(k')^w}$
20.5	201.0	1.07	1.56	0.422	192.7	19.9	223.8	1.06	1.36	0.675	215.2	21.2	262.1	1.09	1.31	0.775	245.0
19.3	203.0	1.06	1.59	0.373	196.5	20.7	223.8	1.06	1.35	0.686	214.5	22.1	264.9	1.10	1.31	0.766	246.6
18.5	200.3	1.06	1.57	0.385	194.3	23.4	224.7	1.07	1.35	0.697	213.9	19.8	263.9	1.08	1.33	0.731	249.6
17.7	192.5	1.05	1.52	0.457	186.3	21.9	227.3	1.07	1.37	0.654	217.9	20.1	266.2	1.08	1.34	0.716	251.5
20.1	200.7	1.06	1.57	0.412	193.1	21.5	220.3	1.07	1.33	0.730	210.3	20.8	266.2	1.09	1.33	0.728	250.4
21.9	205.0	1.07	1.59	0.403	196.1	19.5	217.3	1.06	1.32	0.747	208.3	20.4	267.1	1.08	1.34	0.713	252.1
19.3	199.6	1.06	1.56	0.409	192.6	22.9	217.6	1.07	1.31	0.774	206.3	21.4	268.1	1.09	1.33	0.722	251.5
17.3	194.5	1.05	1.53	0.427	188.9	22.9	224.5	1.07	1.35	0.694	214.1	21.6	265.1	1.09	1.32	0.754	247.7
21.6	203.2	1.07	1.58	0.416	194.3	17.0	214.7	1.05	1.32	0.756	207.1	21.1	261.2	1.09	1.30	0.783	244.2
21.5	198.7	1.07	1.54	0.461	189.3	15.1	218.9	1.04	1.35	0.690	212.7	20.5	263.2	1.09	1.32	0.752	247.5
19.9	198.8	1.06	1.55	0.427	191.3	15.5	220.7	1.04	1.36	0.672	214.5	19.1	258.7	1.07	1.31	0.769	244.9
23.1	199.1	1.08	1.54	0.493	187.5	16.1	219.4	1.05	1.35	0.693	212.7	23.5	268.7	1.11	1.32	0.756	248.4
21.9	201.0	1.07	1.56	0.442	191.6	16.9	219.5	1.05	1.35	0.698	212.4	21.9	265.6	1.10	1.32	0.755	247.7
21.9	198.2	1.07	1.54	0.474	188.3	19.6	219.3	1.06	1.33	0.726	210.3	23.0	267.5	1.11	1.32	0.757	248.0
21.0	204.3	1.07	1.59	0.392	196.3	15.1	219.3	1.04	1.35	0.685	213.2	19.9	259.6	1.08	1.31	0.775	244.6
23.2	202.0	1.08	1.56	0.459	191.1	18.6	220.7	1.06	1.34	0.701	212.5	21.7	266.2	1.09	1.32	0.745	248.9
22.4	202.9	1.07	1.57	0.433	193.2	20.1	228.9	1.06	1.39	0.622	220.6	22.1	263.2	1.10	1.30	0.782	244.6
20.4	199.0	1.06	1.55	0.434	191.0	18.6	220.7	1.06	1.34	0.701	212.4	22.7	268.3	1.10	1.32	0.744	249.5
23.2	199.0	1.07	1.54	0.492	187.6	20.1	228.9	1.06	1.39	0.622	220.6	22.2	266.7	1.10	1.32	0.750	248.5
17.5	193.7	1.05	1.53	0.436	188.0							23.0	268.0	1.11	1.32	0.752	248.6
15.1	199.4	1.04	1.59	0.326	196.4							17.6	258.7	1.06	1.32	0.740	247.5
14.7	193.4	1.04	1.54	0.377	190.5							15.7	252.4	1.05	1.31	0.764	243.9
15.2	196.1	1.04	1.56	0.360	192.9							17.0	255.4	1.06	1.31	0.759	245.0
16.1	195.7	1.05	1.55	0.384	191.6							18.5	257.5	1.07	1.31	0.770	244.6
17.1	193.6	1.05	1.53	0.427	188.4							17.1	256.6	1.06	1.32	0.751	246.1
19.8	199.4	1.06	1.56	0.420	192.0							15.7	254.4	1.05	1.32	0.743	246.2
14.4	199.6	1.04	1.59	0.308	197.2							17.2	256.0	1.06	1.31	0.758	245.3

Table C.1 (Cont.) Flashover voltage data correction of Positive lightning impulse by using New set humidity Correction factor

Pin-Post Insulator Class 56/57-2						Pin-Post Insulator Class 56/57-3						Pin-Post Insulator Class 56/57-4					
h/δ [g/m ³]	$U_{50\%/K_1}$ [kV]	k'	g	w	$\frac{U_{50\%}}{(K_1)(k')^w}$	h/δ [g/m ³]	$U_{50\%/K_1}$ [kV]	k'	g	w	$\frac{U_{50\%}}{(K_1)(k')^w}$	h/δ [g/m ³]	$U_{50\%/K_1}$ [kV]	k'	g	w	$\frac{U_{50\%}}{(K_1)(k')^w}$
21.6	224.1	1.07	1.56	0.350	218.5	21.4	242.7	1.07	1.27	0.841	229.2	21.8	265.4	1.07	1.03	1	247.8
21.2	223.8	1.07	1.56	0.349	218.3	19.3	240.4	1.06	1.27	0.897	228.1	20.1	265.5	1.06	1.03	1	249.6
18.3	220.2	1.06	1.56	0.356	215.7	22.4	241.9	1.07	1.26	0.955	225.8	19.5	262.7	1.06	1.03	1	247.7
18.0	219.6	1.06	1.56	0.356	215.4	20.4	238.6	1.07	1.26	0.944	224.8	19.7	264.5	1.06	1.03	1	249.1
19.2	219.8	1.06	1.55	0.368	214.9	21.7	245.1	1.07	1.29	0.902	230.4	22.1	263.9	1.07	1.02	1	246.0
20.4	223.6	1.07	1.57	0.343	218.6	22.1	238.1	1.07	1.25	0.991	221.9	21.1	260.7	1.07	1.01	1	244.1
18.9	216.5	1.06	1.53	0.398	211.4	20.8	237.8	1.07	1.25	0.963	223.3	20.8	267.3	1.07	1.04	1	250.6
17.3	221.6	1.05	1.57	0.333	217.8	21.5	234.8	1.07	1.23	1.000	219.3	21.7	265.9	1.07	1.03	1	248.3
21.8	216.1	1.07	1.51	0.428	209.5	23.5	243.6	1.08	1.27	0.965	226.1	22.1	267.8	1.07	1.03	1	249.6
21.3	217.7	1.07	1.52	0.409	211.5	22.1	236.5	1.07	1.24	1.000	220.3	21.4	263.4	1.07	1.02	1	246.3
19.8	222.6	1.07	1.56	0.346	217.8	22.7	232.7	1.08	1.21	1.000	216.3	21.4	264.6	1.07	1.03	1	247.4
19.3	223.6	1.06	1.58	0.331	219.1	20.4	230.6	1.07	1.22	1.000	216.5	23.0	267.5	1.08	1.03	1	248.4
22.1	211.0	1.08	1.47	0.486	203.6	21.7	238.0	1.07	1.25	0.982	222.4	21.6	269.6	1.07	1.04	1	251.8
21.5	212.9	1.07	1.49	0.459	206.1	20.8	231.9	1.07	1.22	1.000	217.4	22.4	266.2	1.07	1.03	1	247.9
19.6	212.6	1.06	1.50	0.443	206.8	22.9	232.7	1.08	1.21	1.000	216.0	23.0	265.6	1.08	1.02	1	246.7
21.6	212.3	1.07	1.48	0.469	205.2	15.4	227.9	1.04	1.23	0.942	219.2	15.7	255.9	1.04	1.02	1	245.3
15.4	214.0	1.04	1.53	0.388	210.4	17.5	231.9	1.05	1.24	0.948	221.1	18.2	262.8	1.05	1.03	1	249.1
17.4	211.6	1.05	1.50	0.431	206.9	16.7	233.8	1.05	1.25	0.905	224.2	16.0	257.4	1.04	1.02	1	246.3
14.8	215.0	1.04	1.55	0.371	211.8	18.4	229.7	1.06	1.22	0.996	217.6	18.9	258.9	1.06	1.01	1	244.7
15.2	215.0	1.04	1.54	0.375	211.6	17.4	236.4	1.05	1.26	0.894	226.1	18.0	264.2	1.05	1.04	1	250.7
17.1	211.8	1.05	1.51	0.426	207.3	18.5	230.4	1.06	1.23	0.992	218.2	16.7	260.9	1.05	1.03	1	249.0
16.1	218.3	1.05	1.56	0.352	214.7	21.4	242.7	1.07	1.27	0.841	229.2	21.8	265.4	1.07	1.03	1	247.8
19.2	218.2	1.06	1.54	0.382	213.2	19.3	240.4	1.06	1.27	0.897	228.1	20.1	265.5	1.06	1.03	1	249.6
16.9	211.6	1.05	1.51	0.425	207.2	22.4	241.9	1.07	1.26	0.955	225.8	19.5	262.7	1.06	1.03	1	247.7
21.6	224.1	1.07	1.56	0.350	218.5	20.4	238.6	1.07	1.26	0.944	224.8	19.7	264.5	1.06	1.03	1	249.1
21.2	223.8	1.07	1.56	0.349	218.3	21.7	245.1	1.07	1.29	0.902	230.4	22.1	263.9	1.07	1.02	1	246.0
18.3	220.2	1.06	1.56	0.356	215.7	22.1	238.1	1.07	1.25	0.991	221.9	21.1	260.7	1.07	1.01	1	244.1

Table C.2 Flashover voltage data correction of AC voltage by using New set humidity Correction factor

Line-Post Insulator Class 57-2						Line-Post Insulator Class 57-3						Line-Post Insulator Class 57-4					
h/δ [g/m ³]	$U_{50\%/K_1}$ [kV]	k'	g	w	$\frac{U_{50\%}}{(K_1)(k')^w}$	h/δ [g/m ³]	$U_{50\%/K_1}$ [kV]	k'	g	w	$\frac{U_{50\%}}{(K_1)(k')^w}$	h/δ [g/m ³]	$U_{50\%/K_1}$ [kV]	k'	g	w	$\frac{U_{50\%}}{(K_1)(k')^w}$
22.8	138.2	1.15	1.00	1.00	120.3	20.5	151.4	1.07	0.91	0.818	142.9	22.8	163.7	1.07	0.85	0.691	156.7
19.6	135.5	1.11	1.01	1.00	122.2	21.5	148.8	1.08	0.90	0.782	140.3	23.4	167.5	1.07	0.87	0.721	159.9
18.4	137.1	1.09	1.04	1.00	125.5	19.6	152.0	1.07	0.92	0.834	143.8	20.9	168.5	1.06	0.87	0.732	161.3
24.0	146.2	1.16	1.04	1.00	125.5	19.4	146.5	1.07	0.89	0.774	139.2	20.9	162.7	1.06	0.84	0.677	156.4
23.3	145.3	1.16	1.04	1.00	125.7	21.4	151.0	1.08	0.91	0.809	142.2	19.9	167.6	1.06	0.87	0.727	160.7
21.6	142.8	1.13	1.05	1.00	125.9	20.9	150.8	1.08	0.91	0.813	142.2	21.5	168.0	1.06	0.87	0.730	160.7
22.6	144.3	1.15	1.04	1.00	125.8	21.6	153.0	1.08	0.92	0.827	143.8	18.5	171.3	1.06	0.89	0.765	164.4
22.3	139.6	1.14	1.01	1.00	122.1	22.7	149.7	1.08	0.90	0.784	140.5	19.6	172.2	1.06	0.89	0.776	164.8
22.2	137.6	1.14	1.00	1.00	120.5	23.0	151.0	1.08	0.91	0.798	141.5	18.4	166.7	1.06	0.87	0.728	160.2
22.2	138.0	1.14	1.00	1.00	120.8	15.3	144.5	1.05	0.89	0.774	139.2	18.9	171.5	1.06	0.89	0.770	164.4
23.0	142.2	1.15	1.02	1.00	123.4	21.4	146.3	1.08	0.88	0.756	138.2	22.7	170.4	1.06	0.88	0.746	162.6
15.4	127.8	1.05	1.01	1.00	121.5	23.0	150.9	1.08	0.90	0.797	141.4	20.7	166.8	1.06	0.87	0.724	159.9
17.0	133.7	1.07	1.03	1.00	124.5	22.6	147.6	1.08	0.89	0.759	138.9	19.8	167.4	1.06	0.87	0.733	160.6
21.4	134.5	1.13	0.99	0.98	119.1	20.7	148.7	1.07	0.90	0.788	140.5	21.6	168.4	1.06	0.87	0.730	161.1
22.4	138.0	1.14	1.00	1.00	120.7	18.1	147.2	1.06	0.90	0.785	140.4	22.3	166.7	1.06	0.86	0.714	159.5
23.3	143.2	1.16	1.03	1.00	123.9							21.0	167.8	1.06	0.87	0.726	160.7
23.0	137.2	1.15	0.99	0.99	119.3							23.3	173.7	1.07	0.89	0.777	165.3
18.4	136.9	1.09	1.04	1.00	125.4							21.6	163.3	1.06	0.85	0.682	156.7
18.0	132.2	1.09	1.01	1.00	121.5							22.5	163.6	1.06	0.85	0.681	156.8
17.0	129.1	1.07	1.00	1.00	120.2							23.0	166.0	1.07	0.86	0.709	158.7
22.8	138.2	1.15	1.00	1.00	120.3							16.0	164.3	1.05	0.86	0.709	158.6
19.6	135.5	1.11	1.01	1.00	122.2							15.0	158.5	1.05	0.83	0.658	153.7
18.4	137.1	1.09	1.04	1.00	125.5							21.4	165.7	1.06	0.86	0.711	158.7
24.0	146.2	1.16	1.04	1.00	125.5							22.4	164.6	1.06	0.85	0.698	157.6
23.3	145.3	1.16	1.04	1.00	125.7							22.3	164.3	1.06	0.85	0.693	157.4
21.6	142.8	1.13	1.05	1.00	125.9							19.7	165.7	1.06	0.86	0.713	159.2
22.6	144.3	1.15	1.04	1.00	125.8							22.9	164.1	1.07	0.85	0.689	157.1

Table C.2 (Cont.) Flashover voltage data correction of AC voltage by using New set humidity Correction factor

Pin-Post Insulator Class 56/57-2						Pin-Post Insulator Class 56/57-3						Pin-Post Insulator Class 56/57-4					
h/δ [g/m ³]	$U_{50\%}/K_1$ [kV]	k'	g	w	$\frac{U_{50\%}}{(K_1)(k')^w}$	h/δ [g/m ³]	$U_{50\%}/K_1$ [kV]	k'	g	w	$\frac{U_{50\%}}{(K_1)(k')^w}$	h/δ [g/m ³]	$U_{50\%}/K_1$ [kV]	k'	g	w	$\frac{U_{50\%}}{(K_1)(k')^w}$
20.7	145.8	1.08	1.01	1.000	134.4	18.6	153.6	1.07	0.81	0.626	146.8	17.3	169.7	1.06	0.68	0.411	165.8
20.4	141.9	1.08	0.98	0.965	131.3	18.1	152.2	1.07	0.81	0.622	145.9	18.6	177.8	1.06	0.71	0.452	173.0
19.2	144.4	1.08	1.01	1.000	134.2	23.6	163.5	1.11	0.84	0.667	152.5	21.6	173.0	1.07	0.68	0.409	168.2
18.2	141.0	1.07	0.99	0.975	131.9	22.7	163.1	1.10	0.84	0.674	152.6	22.5	171.9	1.07	0.68	0.406	167.0
17.3	141.9	1.07	1.00	0.998	133.1	22.9	160.5	1.11	0.83	0.647	150.4	22.5	171.3	1.07	0.68	0.403	166.4
18.9	145.1	1.08	1.01	1.000	134.9	22.7	161.3	1.10	0.83	0.658	151.1	14.4	168.8	1.05	0.68	0.411	165.6
22.5	145.5	1.10	1.00	0.995	132.8	21.0	159.5	1.09	0.83	0.653	150.6	16.7	170.2	1.06	0.68	0.410	166.5
19.9	140.8	1.08	0.98	0.955	130.6	23.4	158.2	1.11	0.81	0.625	148.3	20.9	173.6	1.07	0.69	0.422	168.7
21.2	144.8	1.09	1.00	0.999	133.1	16.0	153.6	1.06	0.83	0.652	148.3	21.2	174.6	1.07	0.69	0.427	169.6
20.4	139.6	1.08	0.97	0.933	129.6	15.4	152.3	1.05	0.83	0.646	147.5	21.8	179.4	1.07	0.71	0.451	173.8
21.8	148.7	1.09	1.02	1.000	136.3	17.0	155.7	1.06	0.83	0.659	149.6	18.6	169.1	1.06	0.68	0.402	165.0
22.7	142.6	1.10	0.98	0.952	130.5	21.7	157.3	1.10	0.82	0.634	148.3	20.2	174.1	1.07	0.69	0.424	169.3
22.5	144.3	1.10	0.99	0.979	131.9	22.4	156.3	1.10	0.81	0.618	147.2	17.6	173.5	1.06	0.69	0.427	169.3
15.4	139.6	1.05	0.99	0.984	132.5	23.0	162.0	1.11	0.83	0.663	151.5	18.0	174.7	1.06	0.70	0.436	170.4
16.1	137.8	1.06	0.98	0.952	130.7	19.4	154.8	1.08	0.82	0.632	147.5	17.3	169.7	1.06	0.68	0.411	165.8
20.9	139.9	1.09	0.97	0.932	129.4	19.7	155.6	1.08	0.82	0.636	148.0	18.6	177.8	1.06	0.71	0.452	173.0
21.8	142.5	1.09	0.98	0.960	130.9	21.3	155.2	1.09	0.81	0.616	146.8	21.6	173.0	1.07	0.68	0.409	168.2
20.5	142.1	1.08	0.99	0.967	131.3	18.3	159.6	1.07	0.85	0.685	152.2	22.5	171.9	1.07	0.68	0.406	167.0
18.2	142.0	1.07	1.00	0.990	132.7												
14.8	136.9	1.05	0.98	0.953	130.7												

BIOGRAPHY

Xaysomphone Kounlabout was born on 02 June in 1980 Champasak province, Lao P.D.R. After graduating in 2003 from the Department of Electrical Engineering, Faculty of Engineering, National University of Laos (NUOL), he worked as assistance lecturer in the field of electrical power in 2003-2004 and his continue studying in Master of Electrical Engineering, Department of Electrical Engineering, Chulalongkorn University, Thailand in 2005-2007 under the AUN/SEED-Net scholarship program.

