

Lightning Dissipation Design Comparison

Device	Dissipation at 350 kv/m	Survival Wind Speed mph (1)		Wind Force lbs. (2)		CaAa ft ² (3)		Method of Attachment
		No Ice	1/2" Ice	No Ice	1/2" Ice	No Ice	1/2" Ice	
A-3 Lightning Spur	1100mA	188	153	207	322	7.91	12.32	bracket with 1/2" structural bolts
C-2 Lightning Spur	920 mA	132	107	96	165	3.52	6.12	threaded rod thru beacon plate
Wire Sphere	790 mA	59	5	50	401	1.83	14.57	hose clamp to leg
Crow's Nest	690 mA	112	74	192	347	7.08	12.91	threaded rod thru beacon plate
Wire brush 6 -around	450 mA	100	10	67	157	2.4	5.64	hose clamp to leg
A-1 Lightning Spur	370 mA	188	153	66	104	1.97	3.44	bracket with 1/2" structural bolts
Wire brush 3 -around	265 mA	100	10	34	79	1.2	2.82	hose clamp to leg
Lightning Rod 4' copper	75 mA	82	51	7	18	0.25	0.65	threaded rod thru beacon plate

(1) Survival wind speed has NO safety factor and is based upon TIA/EIA-222-F Standard, K = I, Gh = I, and material yield strengths of; copper = 10,000 psi, stainless steel = 36,000 psi, A-36 steel = 36,000 psi, A-449 steel = 92,000 psi.

(2) PSF windload based upon TIA/EIA-222-C Standard criteria of 50 pounds per sq. ft. for flat surface area and 33 pounds per sq. ft. for round surface area.

(3) CaAa based upon TIA/EIA-222-F Standard criteria and includes mounting brackets.