



VOLT® Wide Spread Flood Filter Set

Diffusion Angles with Various Source Angles* (at Outward/Inward Filter Orientations)

INSTRUCTIONS

VOLT® Wide Spread Flood Filters use a new technology that embeds micro-lenses in an optically clear material. The result is precisely controlled diffusion to achieve specific beam angles dependent on the source beam angle and on the (inward or outward) orientation of the diffusion material.

To find the resultant beam angle, start with the Source Angle (beam angle of LED lamp) then move along that row to the column of the specific filter being used. The number on the left (green) shows the beam angle when the filter is oriented with the opaque side outward. The number on the right shows the angle when the opaque side is oriented inward (toward the lamp).

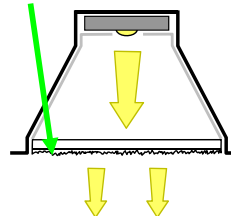
To Install filters:

1. Turn the lens clip upside down so that the clip arms themselves are facing upward.
2. Next, pinch the keeper ring by hand so that you can pull it up and out of the clip. Note: for ease, pinch closely to where the gap in the keeper ring is.
3. Remove installed filter, and insert desired filter in its place. Be sure that the desired filter is facing the proper way.
4. Keeping the new filter flat, pinch the keeper ring and release it to lock it back into its channel. Be sure it's flush against the filter. You are now finished installing your new filter.

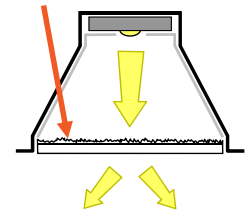
Note: The beam angles printed on the filters show the resultant angles when a 12° source is used.

		VLS-F202-CLF	VLS-F552-CLF	VLS-802-CLF
Source Angle	3	18.3 / 20.2	32 / 58	33 / 72
	5	18.9 / 20.9	33 / 59	34 / 73
	10	21 / 23	35 / 62	36 / 76
	12	23 / 25	36 / 65	38 / 80
	20	26 / 29	38 / 69	39 / 83
	25	29 / 32	39 / 73	41 / 88
	30	33 / 36	40 / 77	42 / 92
	35	37 / 40	42 / 81	43 / 96
	38	39 / 42	43 / 84	44 / 99
	40	41 / 44	44 / 86	45 / 101
	45	45 / 48	47 / 91	47 / 105
	50	50 / 53	49 / 95	49 / 109
	60	59 / 62	55 / 104	54 / 117
	70	67 / 69	59 / 110	58 / 122
	80	75 / 77	64 / 115	62 / 125
	90	82 / 85	69 / 118	67 / 126
100	90 / 92	74 / 121	72 / 127	
110	98 / 99	80 / 123	77 / 127	
120	106 / 106	86 / 124	82 / 127	

First number is source-hiding mode.
Best for hiding LEDs
Microstructure (opaque side) faces outward



Second number is angle-spreading mode
Best for controlling spot/flood angles
Microstructure (opaque side) faces inward



*Source angles in blue are angles that VOLT® carries for MR16 lamps

Angles are Full Width at Half Maximum intensity (FWHM) and were measured using smooth (gaussian-like) light sources. Angles can vary significantly depending on the specific nature of the light source. Angle Data are typical and are not a specification.