

 SloanLED Leaders in LED Technology	Reference	Channel Letter Density Guidelines (Imperial)	Doc. No. RF-12-101 Rev. O	Approval: ALozano Date: 9/29/14
---	-----------	---	------------------------------	------------------------------------

Product	Module Color		Can Depth Inches	Modules Per Foot	Maximum Stroke Coverage Per Row		Inches On Center Dark Vinyl	Inches On Center Perforated Vinyl	Watts per module
					Single Row	Multiple Rows			
VL Plus 2	White (6500K)	Long	5	2	7.5"	6" on center	5	4	0.54
		Short	5	2.5	7.5	6" on center	5	4	0.54
		Mini	5	4	7.5	6" on center	5	4	0.42
VL Plus	White (7200K)	Short	5	2.5	7.5"	6" on center	5	4	0.36
	White (6500K)	Mini / Short	5	4 / 2.5	7.5"	6" on center	5	4	.28 / .36
		Long	5	2	7.5"	6" on center	5	4	0.36
	White (5000K, 4000K, 3000K)	Short	5	2.5	6"	5" on center	4	3	0.36
	Red	Short / Long	5	2.5 / 2	7.5"	6" on center	5	4	.29 / .36
	Orange, Yellow	Short	5	2.5	7.5"	6" on center	5	4	0.29
	Green / Blue	Short	5	2.5	6"	5" on center	4	3	0.36
V180 Mini	White (6500K)		2	4	3"	3" on center	2	Not Recommended	0.31
			3	2.5	4"	4" on center	3	2	
V180 Standard	White (7200K, 6500K, 5000K, 4000K, 3000K)		3	2.5	5"	5" on center	4	3	0.55
			5	2.5	10"	8" on center	7	6	
V180 Large	White (6500K, 5000K)		5	2	13"	10" on center	9	8	1.2
			8	2	16"	15" on center	14	13	
V Series	White, Warm White, Blue, Red, Red/Orange, Orange, Yellow/Amber, Green		3	3	3"	2" on center	Test	Test	0.6
			5	3	6"	5" on center	4	3 ***	
V Series 2	White		5	3	6"	5" on center	4	3	0.55
			8	3	7.5"	6" on center	5	4	
Apollo / CL5 Red	Apollo - White CL5 - Red		5	2	6"	5" on center	4	3	.48 / .6
GW4	White		5	2	7.5"	6" on center	5	5	1.08
			8	2	11"	9" on center	8	7	

These guidelines are intended to provide only an approximation of V Series, V180, Apollo, CL5, GW4, and VL Plus product required for your sign, assuming an optimal balance of performance and cost. SloanLED is not responsible for the actual results based on the use of these guidelines.

Notes:

- 1) It is recommended that you first test the LED density in a sample letter/cabinet to evaluate brightness, uniformity and color.
 - 2) Should you have questions or require assistance in testing, please contact your SloanLED customer service representative.
 - 3) For multiple rows start three inches from the return.
 - 4) Products can be used in can depths deeper or shallower than listed above, but testing is recommended.
 - 5) The acrylic material used for all testing was 3/16" thickness sign grade 2447 acrylic.
- *** Layout requiring one row with can depth three inches or less and/or perforated vinyl needs to be populated at four modules per foot.