

Cree® XLamp® XM Family LEDs



TABLE OF CONTENTS

| | |
|--|----|
| Introduction | 1 |
| Bin and Order Code Formats | 2 |
| Performance Groups – Luminous Flux..... | 3 |
| Performance Groups – Chromaticity..... | 4 |
| Performance groups – Voltage..... | 6 |
| Cree's Standard Chromaticity Regions Plotted on the 1931 CIE Curve..... | 7 |
| Cree's Standard Cool White Kits Plotted on ANSI Standard Chromaticity Regions | 9 |
| Cree's Standard Warm and Neutral White Kits Plotted on ANSI Standard Chromaticity Regions | 10 |
| Cree's Standard Chromaticity Kits | 12 |
| Standard Order Codes and Bins | |
| XM-L ANSI Cool White | 13 |
| XM-L ANSI Neutral White..... | 14 |
| XM-L ANSI Warm White | 15 |
| XM-L2 ANSI Cool White | 16 |
| XM-L2 ANSI Neutral White..... | 17 |
| XM-L2 ANSI Warm White | 18 |
| XM-L High Voltage ANSI Cool White..... | 20 |
| XM-L High Voltage ANSI Neutral White | 21 |
| XM-L High Voltage ANSI Warm White..... | 22 |

INTRODUCTION

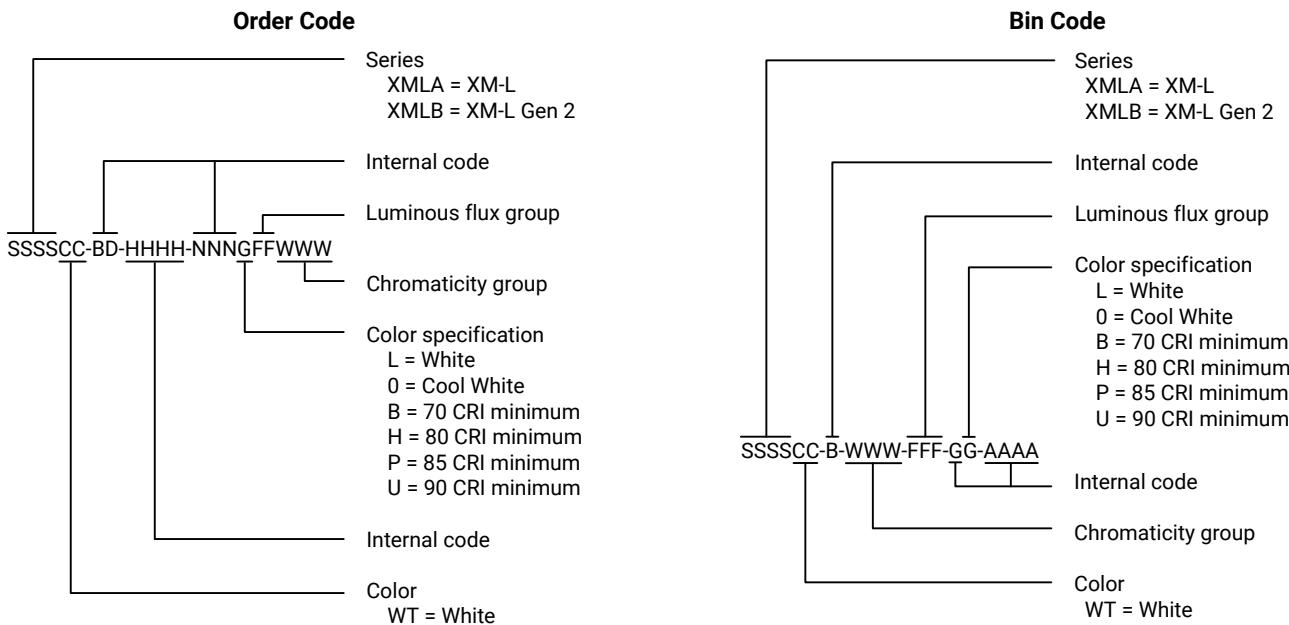
This document describes the product nomenclature required to select and order Cree's XLamp® XM family of LEDs. XLamp XM family LEDs are tested and sorted into bins which are then combined into orderable kits identified by an order code.

All XLamp LEDs are tested and sorted by color and brightness into a unique bin. Each bin contains LEDs from only one color and brightness group and is uniquely identified by a bin code. White XLamp LEDs are sorted by chromaticity (color) and luminous flux (brightness). High Voltage White XLamp LEDs are sorted by chromaticity, luminous flux and voltage. LEDs are shipped on reels containing LEDs from one bin and are always labeled with the appropriate bin code.

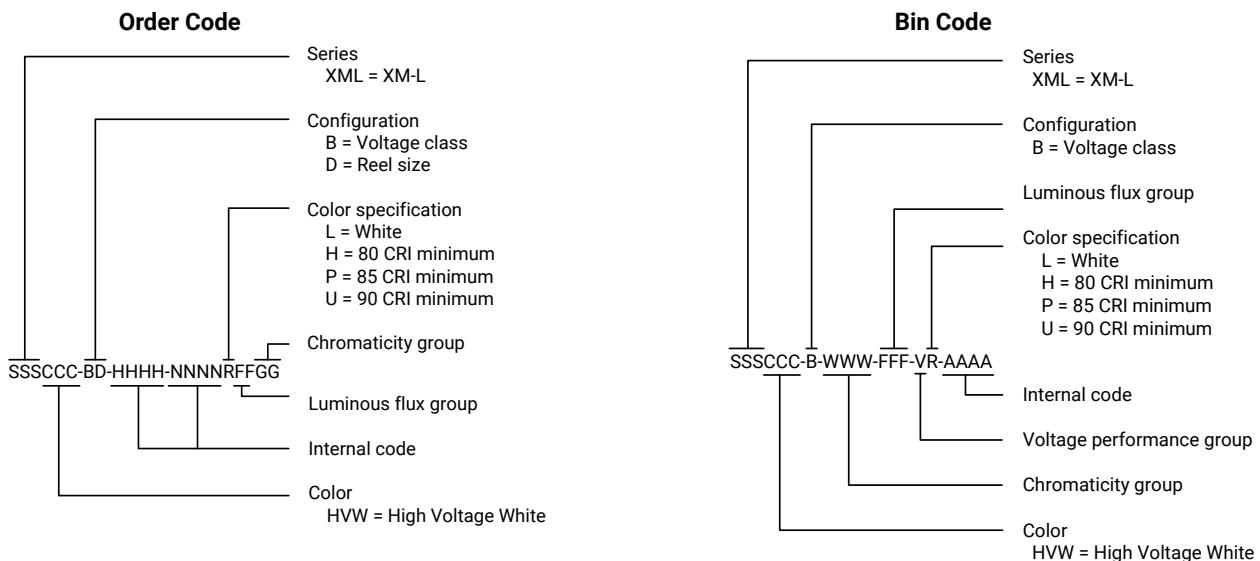
Kits contain LEDs from a number of similar bins and are fully defined by their order codes. A full explanation of the order codes for XLamp XM family LEDs, as well as a list of standard order codes, is provided in this document.

BIN AND ORDER CODE FORMATS

Bin codes and order codes for XM-L and XM-L2 White LEDs are configured in the following manner:



Bin codes and order codes for XM-L High Voltage White LEDs are configured in the following manner:



PERFORMANCE GROUPS – LUMINOUS FLUX

XLamp XM-L and XM-L2 White LEDs are tested for luminous flux and placed into one of the following luminous-flux groups:

| Group Code | Min. Luminous Flux @ 700 mA (lm) | Max. Luminous Flux @ 700 mA (lm) |
|------------|----------------------------------|----------------------------------|
| S2 | 148 | 156 |
| S3 | 156 | 164 |
| S4 | 164 | 172 |
| S5 | 172 | 182 |
| S6 | 182 | 200 |
| T2 | 200 | 220 |
| T3 | 220 | 240 |
| T4 | 240 | 260 |
| T5 | 260 | 280 |
| T6 | 280 | 300 |
| U2 | 300 | 320 |
| U3 | 320 | 340 |
| U4 | 340 | 360 |

XLamp XM-L High Voltage White LEDs are tested for luminous flux and placed into one of the following luminous-flux groups:

| Group Code | Min. Luminous Flux @ 44 mA (lm) | Max. Luminous Flux @ 44 mA (lm) |
|------------|---------------------------------|---------------------------------|
| R5 | 139 | 148 |
| S2 | 148 | 156 |
| S3 | 156 | 164 |
| S4 | 164 | 172 |
| S5 | 172 | 182 |
| S6 | 182 | 200 |
| T2 | 200 | 220 |
| T3 | 220 | 240 |
| T4 | 240 | 260 |
| T5 | 260 | 280 |
| T6 | 280 | 300 |

PERFORMANCE GROUPS – CHROMATICITY

| Region | x | y |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 0A | 0.2950 | 0.2970 | 0B | 0.2920 | 0.3060 | 0C | 0.2984 | 0.3133 | 0D | 0.2984 | 0.3133 |
| | 0.2920 | 0.3060 | | 0.2895 | 0.3135 | | 0.2962 | 0.3220 | | 0.3048 | 0.3207 |
| | 0.2984 | 0.3133 | | 0.2962 | 0.3220 | | 0.3028 | 0.3304 | | 0.3068 | 0.3113 |
| | 0.3009 | 0.3042 | | 0.2984 | 0.3133 | | 0.3048 | 0.3207 | | 0.3009 | 0.3042 |
| 0R | 0.2980 | 0.2880 | 0S | 0.2895 | 0.3135 | 0T | 0.2962 | 0.3220 | 0U | 0.3037 | 0.2937 |
| | 0.2950 | 0.2970 | | 0.2870 | 0.3210 | | 0.2937 | 0.3312 | | 0.3009 | 0.3042 |
| | 0.3009 | 0.3042 | | 0.2937 | 0.3312 | | 0.3005 | 0.3415 | | 0.3068 | 0.3113 |
| | 0.3037 | 0.2937 | | 0.2962 | 0.3220 | | 0.3028 | 0.3304 | | 0.3093 | 0.2993 |
| 1A | 0.3048 | 0.3207 | 1B | 0.3028 | 0.3304 | 1C | 0.3115 | 0.3391 | 1D | 0.3130 | 0.3290 |
| | 0.3130 | 0.3290 | | 0.3115 | 0.3391 | | 0.3205 | 0.3481 | | 0.3213 | 0.3373 |
| | 0.3144 | 0.3186 | | 0.3130 | 0.3290 | | 0.3213 | 0.3373 | | 0.3221 | 0.3261 |
| | 0.3068 | 0.3113 | | 0.3048 | 0.3207 | | 0.3130 | 0.3290 | | 0.3144 | 0.3186 |
| 1R | 0.3068 | 0.3113 | 1S | 0.3005 | 0.3415 | 1T | 0.3099 | 0.3509 | 1U | 0.3144 | 0.3186 |
| | 0.3144 | 0.3186 | | 0.3099 | 0.3509 | | 0.3196 | 0.3602 | | 0.3221 | 0.3261 |
| | 0.3161 | 0.3059 | | 0.3115 | 0.3391 | | 0.3205 | 0.3481 | | 0.3231 | 0.3120 |
| | 0.3093 | 0.2993 | | 0.3028 | 0.3304 | | 0.3115 | 0.3391 | | 0.3161 | 0.3059 |
| 2A | 0.3215 | 0.3350 | 2B | 0.3207 | 0.3462 | 2C | 0.3290 | 0.3538 | 2D | 0.3290 | 0.3417 |
| | 0.3290 | 0.3417 | | 0.3290 | 0.3538 | | 0.3376 | 0.3616 | | 0.3371 | 0.3490 |
| | 0.3290 | 0.3300 | | 0.3290 | 0.3417 | | 0.3371 | 0.3490 | | 0.3366 | 0.3369 |
| | 0.3222 | 0.3243 | | 0.3215 | 0.3350 | | 0.3290 | 0.3417 | | 0.3290 | 0.3300 |
| 2R | 0.3222 | 0.3243 | 2S | 0.3196 | 0.3602 | 2T | 0.3290 | 0.3690 | 2U | 0.3290 | 0.3300 |
| | 0.3290 | 0.3300 | | 0.3290 | 0.3690 | | 0.3381 | 0.3762 | | 0.3366 | 0.3369 |
| | 0.3290 | 0.3180 | | 0.3290 | 0.3538 | | 0.3376 | 0.3616 | | 0.3361 | 0.3245 |
| | 0.3231 | 0.3120 | | 0.3207 | 0.3462 | | 0.3290 | 0.3538 | | 0.3290 | 0.3180 |
| 3A | 0.3371 | 0.3490 | 3B | 0.3376 | 0.3616 | 3C | 0.3463 | 0.3687 | 3D | 0.3451 | 0.3554 |
| | 0.3451 | 0.3554 | | 0.3463 | 0.3687 | | 0.3551 | 0.3760 | | 0.3533 | 0.3620 |
| | 0.3440 | 0.3427 | | 0.3451 | 0.3554 | | 0.3533 | 0.3620 | | 0.3515 | 0.3487 |
| | 0.3366 | 0.3369 | | 0.3371 | 0.3490 | | 0.3451 | 0.3554 | | 0.3440 | 0.3427 |
| 3R | 0.3366 | 0.3369 | 3S | 0.3381 | 0.3762 | 3T | 0.3480 | 0.3840 | 3U | 0.3440 | 0.3428 |
| | 0.3440 | 0.3428 | | 0.3480 | 0.3840 | | 0.3571 | 0.3907 | | 0.3515 | 0.3487 |
| | 0.3429 | 0.3307 | | 0.3463 | 0.3687 | | 0.3551 | 0.3760 | | 0.3495 | 0.3339 |
| | 0.3361 | 0.3245 | | 0.3376 | 0.3616 | | 0.3463 | 0.3687 | | 0.3429 | 0.3307 |
| 4A | 0.3530 | 0.3597 | 4B | 0.3548 | 0.3736 | 4C | 0.3641 | 0.3804 | 4D | 0.3615 | 0.3659 |
| | 0.3615 | 0.3659 | | 0.3641 | 0.3804 | | 0.3736 | 0.3874 | | 0.3702 | 0.3722 |
| | 0.3590 | 0.3521 | | 0.3615 | 0.3659 | | 0.3702 | 0.3722 | | 0.3670 | 0.3578 |
| | 0.3512 | 0.3465 | | 0.3530 | 0.3597 | | 0.3615 | 0.3659 | | 0.3590 | 0.3521 |
| 4R | 0.3512 | 0.3465 | 4S | 0.3571 | 0.3907 | 4T | 0.3668 | 0.3957 | 4U | 0.3590 | 0.3521 |
| | 0.3590 | 0.3521 | | 0.3668 | 0.3957 | | 0.3771 | 0.4034 | | 0.3670 | 0.3578 |
| | 0.3567 | 0.3389 | | 0.3641 | 0.3804 | | 0.3736 | 0.3874 | | 0.3640 | 0.3440 |
| | 0.3495 | 0.3339 | | 0.3548 | 0.3736 | | 0.3641 | 0.3804 | | 0.3567 | 0.3389 |

PERFORMANCE GROUPS – CHROMATICITY (CONTINUED)

| Region | x | y |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 5A1 | 0.3670 | 0.3578 | 5A2 | 0.3686 | 0.3649 | 5A3 | 0.3744 | 0.3685 | 5A4 | 0.3726 | 0.3612 |
| | 0.3686 | 0.3649 | | 0.3702 | 0.3722 | | 0.3763 | 0.3760 | | 0.3744 | 0.3685 |
| | 0.3744 | 0.3685 | | 0.3763 | 0.3760 | | 0.3825 | 0.3798 | | 0.3804 | 0.3721 |
| | 0.3726 | 0.3612 | | 0.3744 | 0.3685 | | 0.3804 | 0.3721 | | 0.3783 | 0.3646 |
| 5B1 | 0.3702 | 0.3722 | 5B2 | 0.3719 | 0.3797 | 5B3 | 0.3782 | 0.3837 | 5B4 | 0.3763 | 0.3760 |
| | 0.3719 | 0.3797 | | 0.3736 | 0.3874 | | 0.3802 | 0.3916 | | 0.3782 | 0.3837 |
| | 0.3782 | 0.3837 | | 0.3802 | 0.3916 | | 0.3869 | 0.3958 | | 0.3847 | 0.3877 |
| | 0.3763 | 0.3760 | | 0.3782 | 0.3837 | | 0.3847 | 0.3877 | | 0.3825 | 0.3798 |
| 5C1 | 0.3825 | 0.3798 | 5C2 | 0.3847 | 0.3877 | 5C3 | 0.3912 | 0.3917 | 5C4 | 0.3887 | 0.3836 |
| | 0.3847 | 0.3877 | | 0.3869 | 0.3958 | | 0.3937 | 0.4001 | | 0.3912 | 0.3917 |
| | 0.3912 | 0.3917 | | 0.3937 | 0.4001 | | 0.4006 | 0.4044 | | 0.3978 | 0.3958 |
| | 0.3887 | 0.3836 | | 0.3912 | 0.3917 | | 0.3978 | 0.3958 | | 0.3950 | 0.3875 |
| 5D1 | 0.3783 | 0.3646 | 5D2 | 0.3804 | 0.3721 | 5D3 | 0.3863 | 0.3758 | 5D4 | 0.3840 | 0.3681 |
| | 0.3804 | 0.3721 | | 0.3825 | 0.3798 | | 0.3887 | 0.3836 | | 0.3863 | 0.3758 |
| | 0.3863 | 0.3758 | | 0.3887 | 0.3836 | | 0.3950 | 0.3875 | | 0.3924 | 0.3794 |
| | 0.3840 | 0.3681 | | 0.3863 | 0.3758 | | 0.3924 | 0.3794 | | 0.3898 | 0.3716 |
| 6A1 | 0.3889 | 0.3690 | 6A2 | 0.3915 | 0.3768 | 6A3 | 0.3981 | 0.3800 | 6A4 | 0.3953 | 0.3720 |
| | 0.3915 | 0.3768 | | 0.3941 | 0.3848 | | 0.4010 | 0.3882 | | 0.3981 | 0.3800 |
| | 0.3981 | 0.3800 | | 0.4010 | 0.3882 | | 0.4080 | 0.3916 | | 0.4048 | 0.3832 |
| | 0.3953 | 0.3720 | | 0.3981 | 0.3800 | | 0.4048 | 0.3832 | | 0.4017 | 0.3751 |
| 6B1 | 0.3941 | 0.3848 | 6B2 | 0.3968 | 0.3930 | 6B3 | 0.4040 | 0.3966 | 6B4 | 0.4010 | 0.3882 |
| | 0.3968 | 0.3930 | | 0.3996 | 0.4015 | | 0.4071 | 0.4052 | | 0.4040 | 0.3966 |
| | 0.4040 | 0.3966 | | 0.4071 | 0.4052 | | 0.4146 | 0.4089 | | 0.4113 | 0.4001 |
| | 0.4010 | 0.3882 | | 0.4040 | 0.3966 | | 0.4113 | 0.4001 | | 0.4080 | 0.3916 |
| 6C1 | 0.4080 | 0.3916 | 6C2 | 0.4113 | 0.4001 | 6C3 | 0.4186 | 0.4037 | 6C4 | 0.4150 | 0.3950 |
| | 0.4113 | 0.4001 | | 0.4146 | 0.4089 | | 0.4222 | 0.4127 | | 0.4186 | 0.4037 |
| | 0.4186 | 0.4037 | | 0.4222 | 0.4127 | | 0.4299 | 0.4165 | | 0.4259 | 0.4073 |
| | 0.4150 | 0.3950 | | 0.4186 | 0.4037 | | 0.4259 | 0.4073 | | 0.4221 | 0.3984 |
| 6D1 | 0.4017 | 0.3751 | 6D2 | 0.4048 | 0.3832 | 6D3 | 0.4116 | 0.3865 | 6D4 | 0.4082 | 0.3782 |
| | 0.4048 | 0.3832 | | 0.4080 | 0.3916 | | 0.4150 | 0.3950 | | 0.4116 | 0.3865 |
| | 0.4116 | 0.3865 | | 0.4150 | 0.3950 | | 0.4221 | 0.3984 | | 0.4183 | 0.3898 |
| | 0.4082 | 0.3782 | | 0.4116 | 0.3865 | | 0.4183 | 0.3898 | | 0.4147 | 0.3814 |
| 7A1 | 0.4147 | 0.3814 | 7A2 | 0.4183 | 0.3898 | 7A3 | 0.4242 | 0.3919 | 7A4 | 0.4203 | 0.3833 |
| | 0.4183 | 0.3898 | | 0.4221 | 0.3984 | | 0.4281 | 0.4006 | | 0.4242 | 0.3919 |
| | 0.4242 | 0.3919 | | 0.4281 | 0.4006 | | 0.4342 | 0.4028 | | 0.4300 | 0.3939 |
| | 0.4203 | 0.3833 | | 0.4242 | 0.3919 | | 0.4300 | 0.3939 | | 0.4259 | 0.353 |
| 7B1 | 0.4221 | 0.3984 | 7B2 | 0.4259 | 0.4073 | 7B3 | 0.4322 | 0.4096 | 7B4 | 0.4281 | 0.4006 |
| | 0.4259 | 0.4073 | | 0.4299 | 0.4165 | | 0.4364 | 0.4188 | | 0.4322 | 0.4096 |
| | 0.4322 | 0.4096 | | 0.4364 | 0.4188 | | 0.4430 | 0.4212 | | 0.4385 | 0.4119 |
| | 0.4281 | 0.4006 | | 0.4322 | 0.4096 | | 0.4385 | 0.4119 | | 0.4342 | 0.4028 |

PERFORMANCE GROUPS – CHROMATICITY (CONTINUED)

| Region | x | y |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 7C1 | 0.4342 | 0.4028 | 7C2 | 0.4385 | 0.4119 | 7C3 | 0.4449 | 0.4141 | 7C4 | 0.4403 | 0.4049 |
| | 0.4385 | 0.4119 | | 0.4430 | 0.4212 | | 0.4496 | 0.4236 | | 0.4449 | 0.4141 |
| | 0.4449 | 0.4141 | | 0.4496 | 0.4236 | | 0.4562 | 0.4260 | | 0.4513 | 0.4164 |
| | 0.4403 | 0.4049 | | 0.4449 | 0.4141 | | 0.4513 | 0.4164 | | 0.4465 | 0.4071 |
| 7D1 | 0.4259 | 0.3853 | 7D2 | 0.4300 | 0.3939 | 7D3 | 0.4359 | 0.3960 | 7D4 | 0.4316 | 0.3873 |
| | 0.4300 | 0.3939 | | 0.4342 | 0.4028 | | 0.4403 | 0.4049 | | 0.4359 | 0.3960 |
| | 0.4359 | 0.3960 | | 0.4403 | 0.4049 | | 0.4465 | 0.4071 | | 0.4418 | 0.3981 |
| | 0.4316 | 0.3873 | | 0.4359 | 0.3960 | | 0.4418 | 0.3981 | | 0.4373 | 0.3893 |
| 8A1 | 0.4373 | 0.3893 | 8A2 | 0.4418 | 0.3981 | 8A3 | 0.4475 | 0.3994 | 8A4 | 0.4428 | 0.3906 |
| | 0.4418 | 0.3981 | | 0.4465 | 0.4071 | | 0.4523 | 0.4085 | | 0.4475 | 0.3994 |
| | 0.4475 | 0.3994 | | 0.4523 | 0.4085 | | 0.4582 | 0.4099 | | 0.4532 | 0.4008 |
| | 0.4428 | 0.3906 | | 0.4475 | 0.3994 | | 0.4532 | 0.4008 | | 0.4483 | 0.3919 |
| 8B1 | 0.4465 | 0.4071 | 8B2 | 0.4513 | 0.4164 | 8B3 | 0.4573 | 0.4178 | 8B4 | 0.4523 | 0.4085 |
| | 0.4513 | 0.4164 | | 0.4562 | 0.4260 | | 0.4624 | 0.4274 | | 0.4573 | 0.4178 |
| | 0.4573 | 0.4178 | | 0.4624 | 0.4274 | | 0.4687 | 0.4289 | | 0.4634 | 0.4193 |
| | 0.4523 | 0.4085 | | 0.4573 | 0.4178 | | 0.4634 | 0.4193 | | 0.4582 | 0.4099 |
| 8C1 | 0.4582 | 0.4099 | 8C2 | 0.4634 | 0.4193 | 8C3 | 0.4695 | 0.4207 | 8C4 | 0.4641 | 0.4112 |
| | 0.4634 | 0.4193 | | 0.4687 | 0.4289 | | 0.4750 | 0.4304 | | 0.4695 | 0.4207 |
| | 0.4695 | 0.4207 | | 0.4750 | 0.4304 | | 0.4813 | 0.4319 | | 0.4756 | 0.4221 |
| | 0.4641 | 0.4112 | | 0.4695 | 0.4207 | | 0.4756 | 0.4221 | | 0.4700 | 0.4126 |
| 8D1 | 0.4483 | 0.3919 | 8D2 | 0.4532 | 0.4008 | 8D3 | 0.4589 | 0.4021 | 8D4 | 0.4538 | 0.3931 |
| | 0.4532 | 0.4008 | | 0.4582 | 0.4099 | | 0.4641 | 0.4112 | | 0.4589 | 0.4021 |
| | 0.4589 | 0.4021 | | 0.4641 | 0.4112 | | 0.4700 | 0.4126 | | 0.4646 | 0.4034 |
| | 0.4538 | 0.3931 | | 0.4589 | 0.4021 | | 0.4646 | 0.4034 | | 0.4593 | 0.3944 |

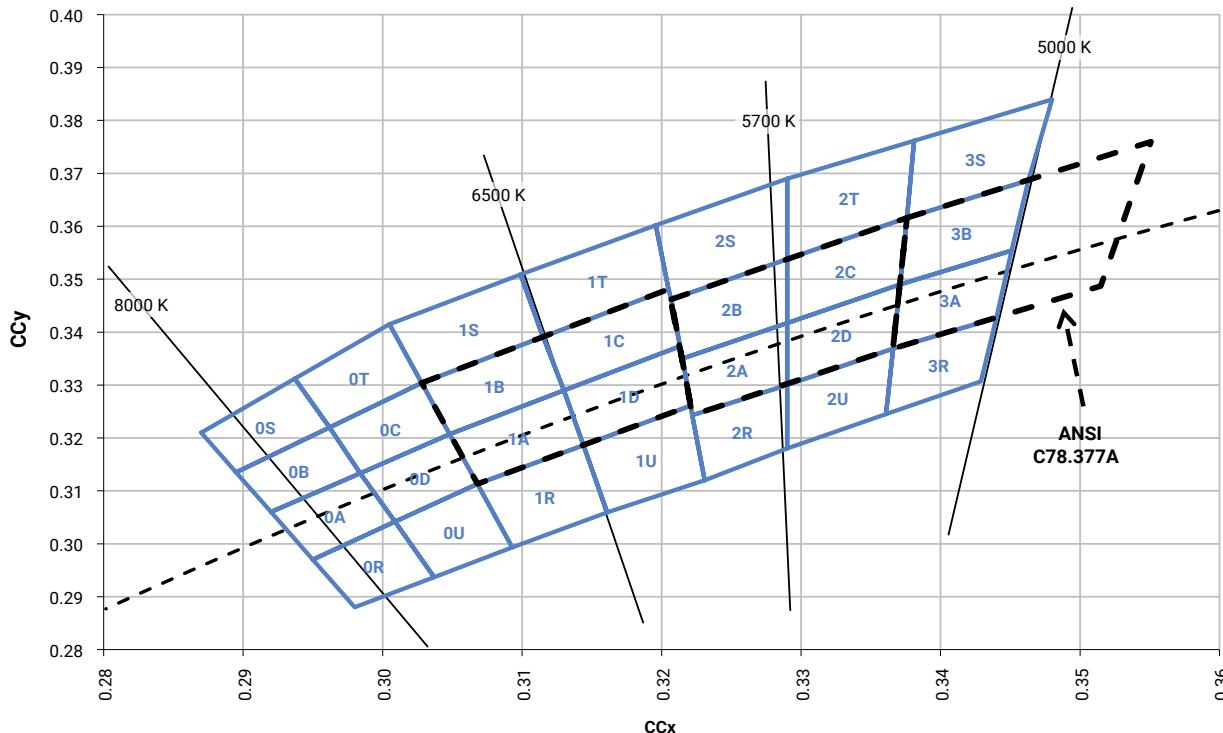
PERFORMANCE GROUPS – VOLTAGE

XLamp XM-L High Voltage White LEDs are classified into one of the following voltage classes:

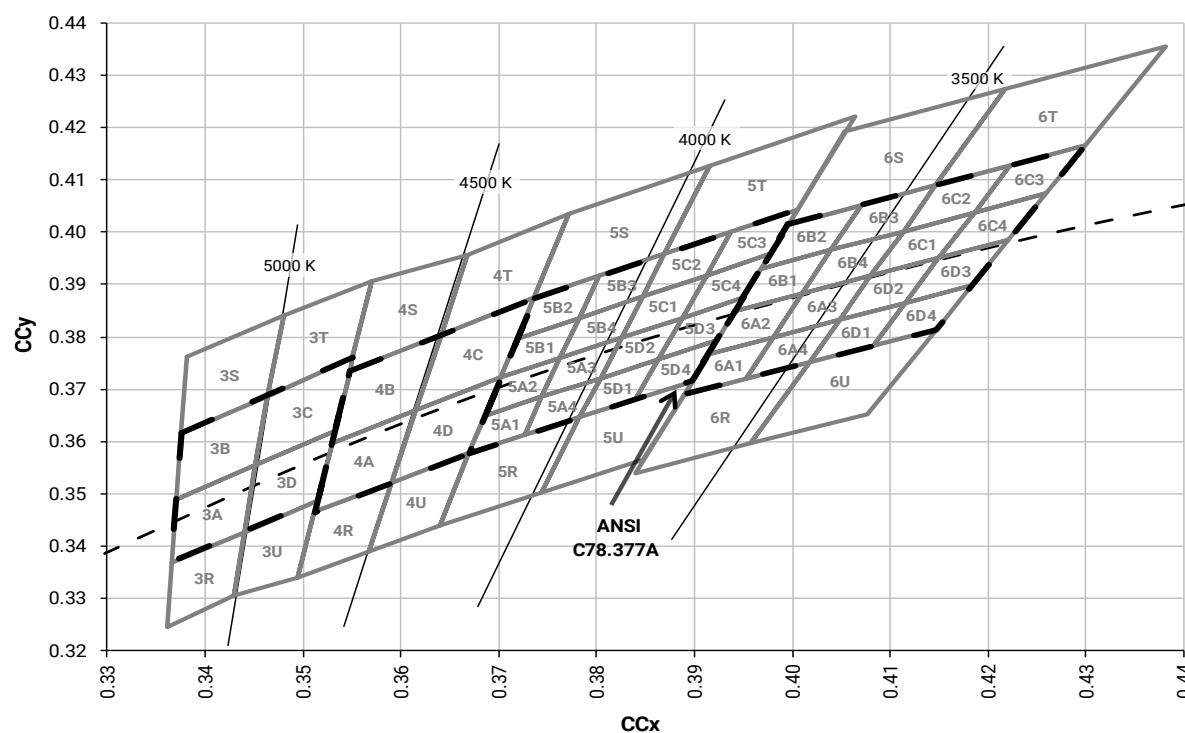
| Forward Voltage Class | Minimum Forward Voltage @ 44 mA (V) T _j = 85 °C | Maximum Forward Voltage @ 44 mA (V) T _j = 85 °C |
|-----------------------|---|---|
| No voltage bin | | |
| 0 | 40.0 | 42.5 |
| 1 | 42.5 | 45.0 |
| 2 | 45.0 | 47.5 |
| 3 | 47.5 | 50.0 |
| 4 | 50.0 | 52.5 |
| 5 | 52.5 | 55.0 |

CREE'S STANDARD CHROMATICITY REGIONS PLOTTED ON THE 1931 CIE CURVE

ANSI Cool White

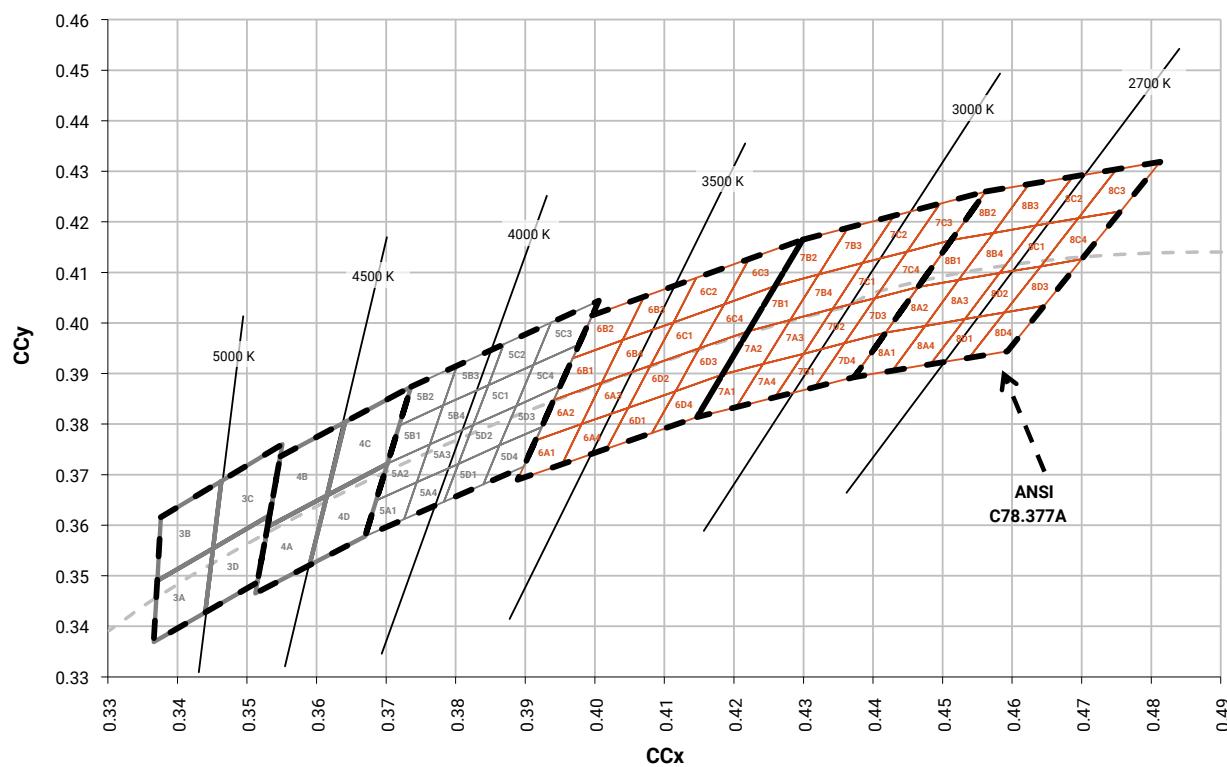


Neutral White

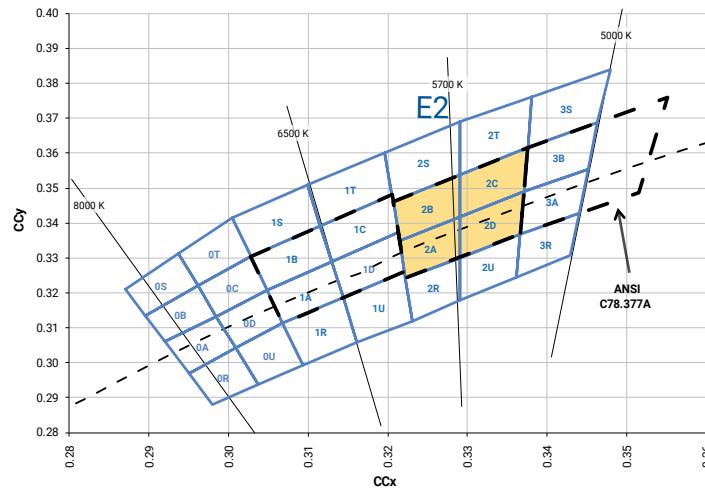
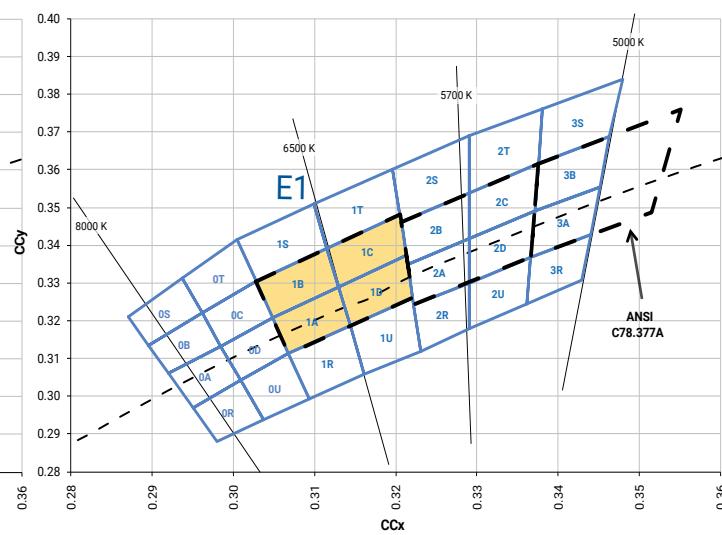
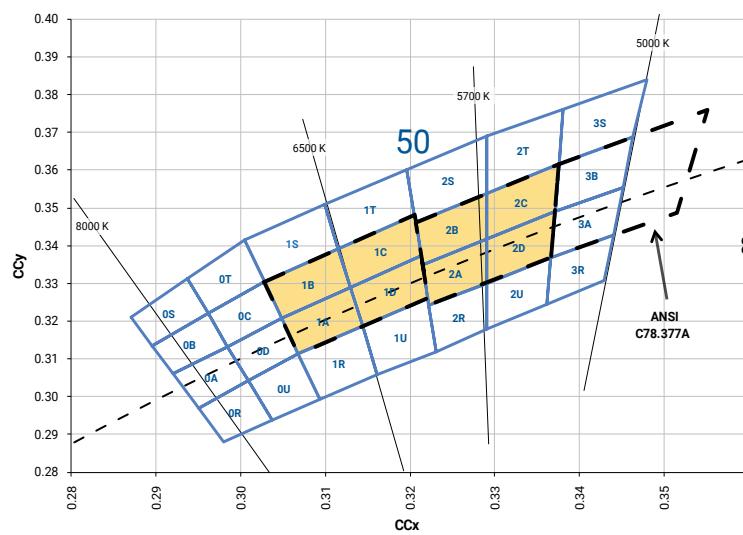
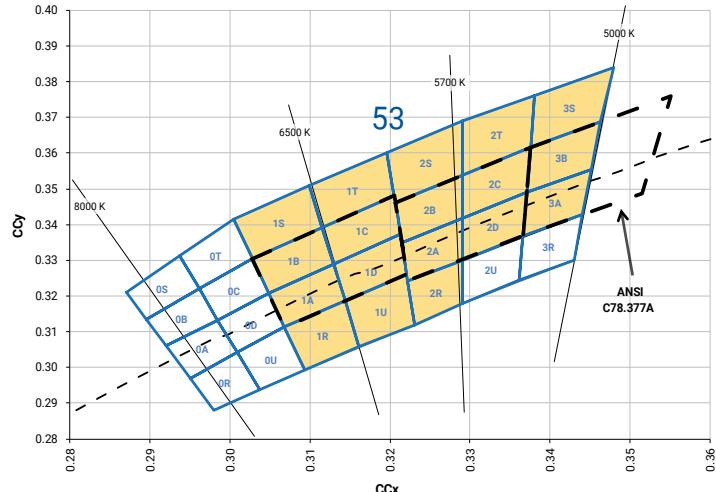
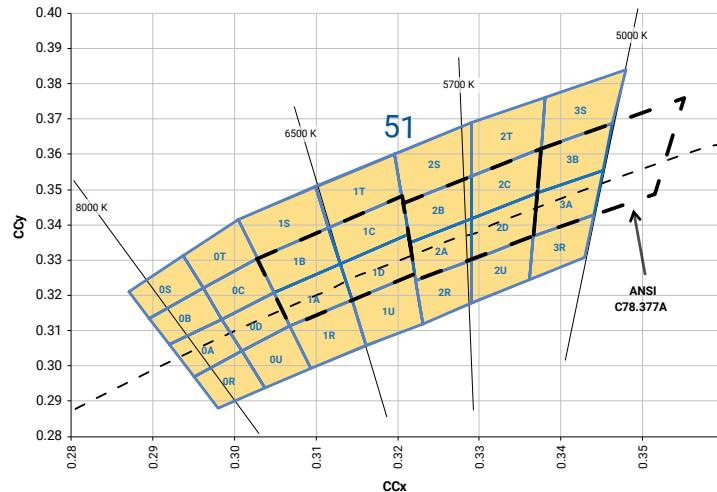


CREE'S STANDARD CHROMATICITY REGIONS PLOTTED ON THE 1931 CIE CURVE - CONTINUED

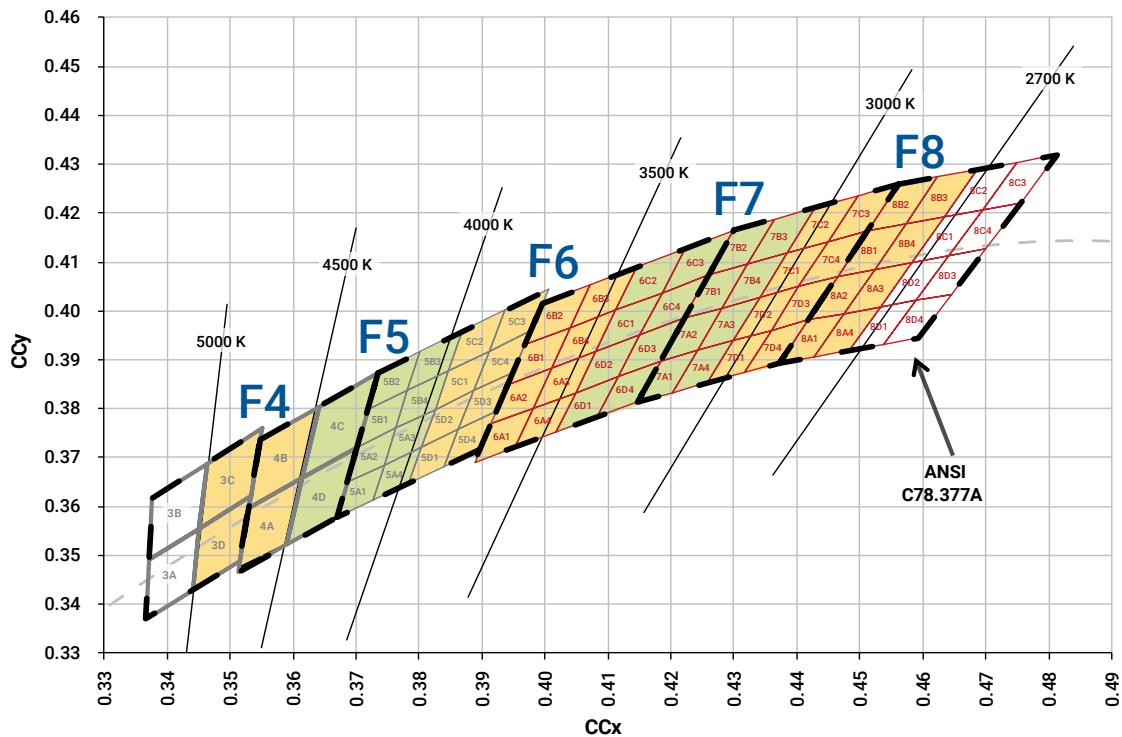
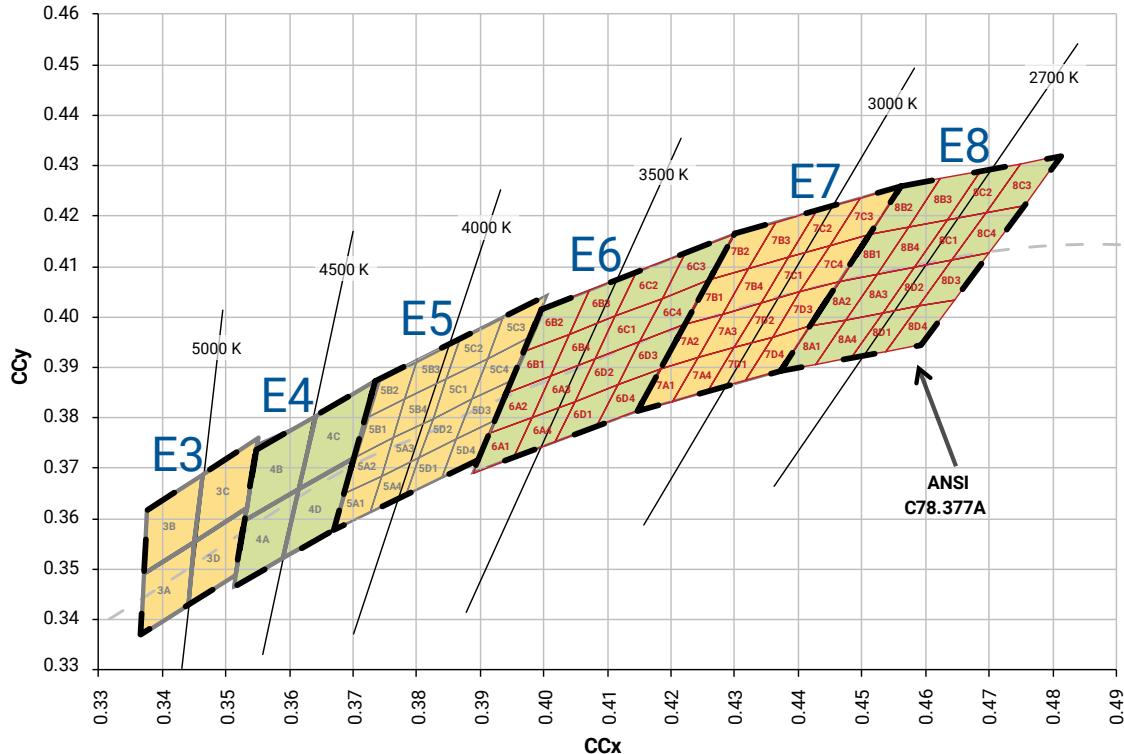
ANSI Neutral White and ANSI warm white



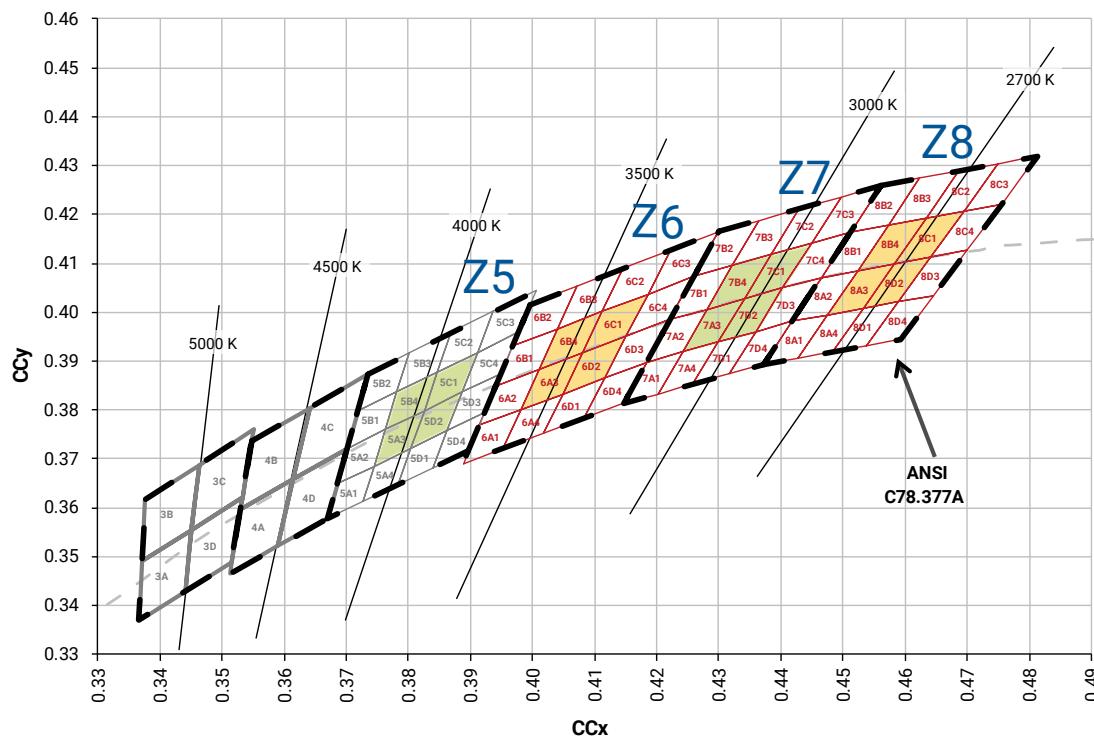
CREE'S STANDARD COOL WHITE KITS PLOTTED ON ANSI STANDARD CHROMATICITY REGIONS



CREE'S STANDARD WARM AND NEUTRAL WHITE KITS PLOTTED ON ANSI STANDARD CHROMATICITY REGIONS



CREE'S STANDARD WARM AND NEUTRAL WHITE KITS PLOTTED ON ANSI STANDARD CHROMATICITY REGIONS -
CONTINUED



CREE'S STANDARD CHROMATICITY KITS

The following table provides the chromaticity bins associated with chromaticity kits.

| Color | CCT | Kit | Chromaticity Bins |
|---------------|--------|-----|--|
| Cool White | 6200 K | 51 | 0A, 0B, 0C, 0D, 0R, 0S, 0T, 0U, 1A, 1B, 1C, 1D, 1R, 1S, 1T, 1U, 2A, 2B, 2C, 2D, 2R, 2S, 2T, 2U, 3A, 3B, 3R, 3S |
| | 6000 K | 53 | 1A, 1B, 1C, 1D, 1R, 1S, 1T, 1U, 2A, 2B, 2C, 2D, 2R, 2S, 2T, 3A, 3B, 3S |
| | 6200 K | 50 | 1A, 1B, 1C, 1D, 2A, 2B, 2C, 2D |
| | 6500 K | E1 | 1A, 1B, 1C, 1D |
| | 5700 K | E2 | 2A, 2B, 2C, 2D |
| Neutral White | 5000 K | E3 | 3A, 3B, 3C, 3D |
| | 4750 K | F4 | 3C, 3D, 4A, 4B |
| | 4500 K | E4 | 4A, 4B, 4C, 4D |
| | 4250 K | F5 | 4C, 4D, 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4 |
| | 4000 K | E5 | 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4, 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4 |
| | 4000 K | Z5 | 5A3, 5B4, 5C1, 5D2 |
| Warm White | 3750 K | F6 | 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4, 6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4 |
| | 3500 K | E6 | 6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4, 6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4 |
| | 3500 K | Z6 | 6A3, 6B4, 6C1, 6D2 |
| | 3250 K | F7 | 6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4, 7A1, 7A2, 7A3, 7A4, 7B1, 7B2, 7B3, 7B4 |
| | 3000 K | E7 | 7A1, 7A2, 7A3, 7A4, 7B1, 7B2, 7B3, 7B4, 7C1, 7C2, 7C3, 7C4, 7D1, 7D2, 7D3, 7D4 |
| | 3000 K | Z7 | 7A3, 7B4, 7C1, 7D2 |
| | 2850 K | F8 | 7C1, 7C2, 7C3, 7C4, 7D1, 7D2, 7D3, 7D4, 8A1, 8A2, 8A3, 8A4, 8B1, 8B2, 8B3, 8B4 |
| | 2700 K | E8 | 8A1, 8A2, 8A3, 8A4, 8B1, 8B2, 8B3, 8B4, 8C1, 8C2, 8C3, 8C4, 8D1, 8D2, 8D3, 8D4 |
| | 2700 K | Z8 | 8A3, 8B4, 8C1, 8D2 |

- * Cree XLamp XM Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

The following tables of order codes list flux minimums and chromaticity regions for XLamp XM family LEDs. For other flux and chromaticity combinations, contact Cree or an authorized distributor.

STANDARD ORDER CODES AND BINS (XM-L ANSI COOL WHITE, T_J = 25 °C)

| XLamp XM-L LED Standard Order Codes - White | | | | |
|---|--------|--------------------------------------|-----------|--------------------------|
| Chromaticity | | Minimum Luminous Flux (lm) @ 700 mA* | | Order Codes |
| Kit | CCT | Code | Flux (lm) | 65 CRI Typical |
| ANSI Cool White (5000 K – 8300 K) | | | | |
| 51 | 6200 K | U2 | 300 | XMLAWT-00-0000-0000U2051 |
| | | T6 | 280 | XMLAWT-00-0000-0000T6051 |
| | | T5 | 260 | XMLAWT-00-0000-0000T5051 |
| 53 | 6000 K | U2 | 300 | XMLAWT-00-0000-0000U2053 |
| | | T6 | 280 | XMLAWT-00-0000-0000T6053 |
| | | T5 | 260 | XMLAWT-00-0000-0000T5053 |
| 50 | 6200 K | U2 | 300 | XMLAWT-00-0000-0000U2050 |
| | | T6 | 280 | XMLAWT-00-0000-0000T6050 |
| | | T5 | 260 | XMLAWT-00-0000-0000T5050 |
| E1 | 6500 K | U2 | 300 | XMLAWT-00-0000-0000U20E1 |
| | | T6 | 280 | XMLAWT-00-0000-0000T60E1 |
| | | T5 | 260 | XMLAWT-00-0000-0000T50E1 |
| E2 | 5700 K | U2 | 300 | XMLAWT-00-0000-0000U20E2 |
| | | T6 | 280 | XMLAWT-00-0000-0000T60E2 |
| | | T5 | 260 | XMLAWT-00-0000-0000T50E2 |

- * Cree XLamp XM Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

STANDARD ORDER CODES AND BINS (XM-L ANSI NEUTRAL WHITE, T_j = 25 °C)

| XLamp XM-L LED Standard Kit Codes - White | | | | | |
|---|--------|--------------------------------------|-----------|--------------------------|--------------------------|
| Chromaticity | | Minimum Luminous Flux (lm) @ 700 mA* | | Order Codes | |
| Kit | CCT | Code | Flux (lm) | 75 CRI Typical | 80 CRI Minimum |
| ANSI Neutral White (3700 K – 5000 K) | | | | | |
| E3 | 5000 K | T6 | 280 | XMLAWT-00-0000-000LT60E3 | |
| | | T5 | 260 | XMLAWT-00-0000-000LT50E3 | |
| | | T4 | 240 | XMLAWT-00-0000-000LT40E3 | |
| F4 | 4750 K | T5 | 260 | XMLAWT-00-0000-000LT50F4 | |
| | | T4 | 240 | XMLAWT-00-0000-000LT40F4 | |
| E4 | 4500 K | T5 | 260 | XMLAWT-00-0000-000LT50E4 | |
| | | T4 | 240 | XMLAWT-00-0000-000LT40E4 | |
| F5 | 4250 K | T5 | 260 | XMLAWT-00-0000-000LT50F5 | |
| | | T4 | 240 | XMLAWT-00-0000-000LT40F5 | |
| E5 | 4000 K | T5 | 260 | XMLAWT-00-0000-000LT50E5 | |
| | | T4 | 240 | XMLAWT-00-0000-000LT40E5 | XMLAWT-00-0000-000HT40E5 |
| | | T3 | 220 | XMLAWT-00-0000-000LT30E5 | XMLAWT-00-0000-000HT30E5 |
| Z5 | 4000 K | T4 | 240 | XMLAWT-00-0000-000LT40Z5 | |
| | | T3 | 220 | XMLAWT-00-0000-000LT30Z5 | XMLAWT-00-0000-000HT30Z5 |

- * Cree XLamp XM Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

STANDARD ORDER CODES AND BINS (XM-L ANSI WARM WHITE, T_J = 25 °C)

| XLamp XM-L LED Standard Kit Codes - White | | | | | | | |
|---|--------|--------------------------------------|-----------|--------------------------|--------------------------|--------------------------|--------------------------|
| Chromaticity | | Minimum Luminous Flux (lm) @ 700 mA* | | Order Codes | | | |
| Kit | CCT | Code | Flux (lm) | 80 CRI Typical | 80 CRI Minimum | 85 CRI Minimum | 90 CRI Minimum |
| ANSI Warm White (2700 K - 3750 K) | | | | | | | |
| F6 | 3750 K | T4 | 240 | XMLAWT-00-0000-000LT40F6 | XMLAWT-00-0000-000HT40F6 | | |
| | | T3 | 220 | XMLAWT-00-0000-000LT30F6 | XMLAWT-00-0000-000HT30F6 | | |
| | | T2 | 200 | XMLAWT-00-0000-000LT20F6 | XMLAWT-00-0000-000HT20F6 | | |
| E6 | 3500 K | T4 | 240 | XMLAWT-00-0000-000LT40E6 | XMLAWT-00-0000-000HT40E6 | | |
| | | T3 | 220 | XMLAWT-00-0000-000LT30E6 | XMLAWT-00-0000-000HT30E6 | | |
| | | T2 | 200 | XMLAWT-00-0000-000LT20E6 | XMLAWT-00-0000-000HT20E6 | | |
| Z6 | 3500 K | T3 | 220 | XMLAWT-00-0000-000LT30Z6 | XMLAWT-00-0000-000HT30Z6 | | |
| | | T2 | 200 | XMLAWT-00-0000-000LT20Z6 | XMLAWT-00-0000-000HT20Z6 | | |
| F7 | 3250 K | T3 | 220 | XMLAWT-00-0000-000LT30F7 | XMLAWT-00-0000-000HT30F7 | | |
| | | T2 | 200 | XMLAWT-00-0000-000LT20F7 | XMLAWT-00-0000-000HT20F7 | | |
| E7 | 3000 K | T3 | 220 | XMLAWT-00-0000-000LT30E7 | XMLAWT-00-0000-000HT30E7 | | |
| | | T2 | 200 | XMLAWT-00-0000-000LT20E7 | XMLAWT-00-0000-000HT20E7 | | |
| | | S6 | 182 | | | XMLAWT-00-0000-000PS60E7 | XMLAWT-00-0000-000US60E7 |
| | | S5 | 172 | | | XMLAWT-00-0000-000PS50E7 | XMLAWT-00-0000-000US50E7 |
| | | S4 | 164 | | | XMLAWT-00-0000-000PS40E7 | XMLAWT-00-0000-000US40E7 |
| Z7 | 3000 K | T3 | 220 | XMLAWT-00-0000-000LT30Z7 | XMLAWT-00-0000-000HT30Z7 | | |
| | | T2 | 200 | XMLAWT-00-0000-000LT20Z7 | XMLAWT-00-0000-000HT20Z7 | | |
| | | S6 | 182 | | | XMLAWT-00-0000-000PS50Z7 | XMLAWT-00-0000-000US50Z7 |
| | | S5 | 172 | | | XMLAWT-00-0000-000PS40Z7 | XMLAWT-00-0000-000US40Z7 |
| | | S4 | 164 | | | XMLAWT-00-0000-000PS30Z7 | XMLAWT-00-0000-000US30Z7 |
| F8 | 2850 K | T2 | 200 | XMLAWT-00-0000-000LT20F8 | XMLAWT-00-0000-000HT20F8 | | |
| | | S6 | 182 | XMLAWT-00-0000-000LS60F8 | XMLAWT-00-0000-000HS60F8 | | |
| | | S5 | 172 | | | XMLAWT-00-0000-000PS50F8 | XMLAWT-00-0000-000US50F8 |
| | | S4 | 164 | | | XMLAWT-00-0000-000PS40F8 | XMLAWT-00-0000-000US40F8 |
| | | S3 | 156 | | | XMLAWT-00-0000-000PS30F8 | XMLAWT-00-0000-000US30F8 |
| E8 | 2700 K | T2 | 200 | XMLAWT-00-0000-000LT20E8 | XMLAWT-00-0000-000HT20E8 | | |
| | | S6 | 182 | XMLAWT-00-0000-000LS60E8 | XMLAWT-00-0000-000HS60E8 | | |
| | | S5 | 172 | | | XMLAWT-00-0000-000PS50E8 | XMLAWT-00-0000-000US50E8 |
| | | S4 | 164 | | | XMLAWT-00-0000-000PS40E8 | XMLAWT-00-0000-000US40E8 |
| | | S3 | 156 | | | XMLAWT-00-0000-000PS30E8 | XMLAWT-00-0000-000US30E8 |
| Z8 | 2700 K | T2 | 200 | XMLAWT-00-0000-000LT20Z8 | XMLAWT-00-0000-000HT20Z8 | | |
| | | S6 | 182 | XMLAWT-00-0000-000LS60Z8 | XMLAWT-00-0000-000HS60Z8 | | |
| | | S5 | 172 | | | | |
| | | S4 | 164 | | | XMLAWT-00-0000-000PS40Z8 | XMLAWT-00-0000-000US40Z8 |
| | | S3 | 156 | | | XMLAWT-00-0000-000PS30Z8 | XMLAWT-00-0000-000US30Z8 |

- * Cree XLamp XM Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

STANDARD ORDER CODES AND BINS (XM-L2 ANSI COOL WHITE, T_j = 85 °C)

| XLamp XM-L2 LED Standard Order Codes - White | | | | | |
|--|--------|--------------------------------------|-----------|--------------------------|--------------------------|
| Chromaticity | | Minimum Luminous Flux (lm) @ 700 mA* | | Order Codes | |
| Kit | CCT | Code | Flux (lm) | 65 CRI Typical | 85 CRI Minimum |
| ANSI Cool White (5000 K – 8300 K) | | | | | |
| 51 | 6200 K | U3 | 320 | XMLBWT-00-0000-0000U3051 | |
| | | U2 | 300 | XMLBWT-00-0000-0000U2051 | |
| | | T6 | 280 | XMLBWT-00-0000-0000T6051 | |
| | | T5 | 260 | XMLBWT-00-0000-0000T5051 | |
| | | T4 | 240 | | XMLBWT-00-0000-000PT4051 |
| | | T3 | 220 | | XMLBWT-00-0000-000PT3051 |
| | | T2 | 200 | | XMLBWT-00-0000-000PT2051 |
| 53 | 6000 K | U3 | 320 | XMLBWT-00-0000-0000U3053 | |
| | | U2 | 300 | XMLBWT-00-0000-0000U2053 | |
| | | T6 | 280 | XMLBWT-00-0000-0000T6053 | |
| | | T5 | 260 | XMLBWT-00-0000-0000T5053 | |
| | | T4 | 240 | | XMLBWT-00-0000-000PT4053 |
| | | T3 | 220 | | XMLBWT-00-0000-000PT3053 |
| | | T2 | 200 | | XMLBWT-00-0000-000PT2053 |
| 50 | 6200 K | U3 | 320 | XMLBWT-00-0000-0000U3050 | |
| | | U2 | 300 | XMLBWT-00-0000-0000U2050 | |
| | | T6 | 280 | XMLBWT-00-0000-0000T6050 | |
| | | T5 | 260 | XMLBWT-00-0000-0000T5050 | |
| | | T4 | 240 | | XMLBWT-00-0000-000PT4050 |
| | | T3 | 220 | | XMLBWT-00-0000-000PT3050 |
| | | T2 | 200 | | XMLBWT-00-0000-000PT2050 |
| E1 | 6500 K | U3 | 320 | XMLBWT-00-0000-0000U30E1 | |
| | | U2 | 300 | XMLBWT-00-0000-0000U20E1 | |
| | | T6 | 280 | XMLBWT-00-0000-0000T60E1 | |
| | | T5 | 260 | XMLBWT-00-0000-0000T50E1 | |
| | | T4 | 240 | | XMLBWT-00-0000-000PT40E1 |
| | | T3 | 220 | | XMLBWT-00-0000-000PT30E1 |
| | | T2 | 200 | | XMLBWT-00-0000-000PT20E1 |
| E2 | 5700 K | U3 | 320 | XMLBWT-00-0000-0000U30E2 | |
| | | U2 | 300 | XMLBWT-00-0000-0000U20E2 | |
| | | T6 | 280 | XMLBWT-00-0000-0000T60E2 | |
| | | T5 | 260 | XMLBWT-00-0000-0000T50E2 | |
| | | T4 | 240 | | XMLBWT-00-0000-000PT40E2 |
| | | T3 | 220 | | XMLBWT-00-0000-000PT30E2 |
| | | T2 | 200 | | XMLBWT-00-0000-000PT20E2 |

- * Cree XLamp XM Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

STANDARD ORDER CODES AND BINS (XM-L2 ANSI NEUTRAL WHITE, T_j = 85 °C)

| XLamp XM-L2 LED Standard Kit Codes - White | | | | | | |
|--|--------|--------------------------------------|-----------|--------------------------|--------------------------|--------------------------|
| Chromaticity | | Minimum Luminous Flux (lm) @ 700 mA* | | Order Codes | | |
| Kit | CCT | Code | Flux (lm) | 70 CRI Minimum | 75 CRI Typical | 80 CRI Minimum |
| ANSI Neutral White (3700 K – 5000 K) | | | | | | |
| E3 | 5000 K | U3 | 320 | XMLBWT-00-0000-000BU30E3 | | |
| | | U2 | 300 | XMLBWT-00-0000-000BU20E3 | XMLBWT-00-0000-000LU20E3 | |
| | | T6 | 280 | XMLBWT-00-0000-000BT60E3 | XMLBWT-00-0000-000LT60E3 | |
| | | T5 | 260 | XMLBWT-00-0000-000BT50E3 | XMLBWT-00-0000-000LT50E3 | |
| | | T4 | 240 | | XMLBWT-00-0000-000LT40E3 | |
| F4 | 4750 K | U3 | 320 | XMLBWT-00-0000-000BU30F4 | | |
| | | U2 | 300 | XMLBWT-00-0000-000BU20F4 | XMLBWT-00-0000-000LU20F4 | |
| | | T6 | 280 | XMLBWT-00-0000-000BT60F4 | XMLBWT-00-0000-000LT60F4 | |
| | | T5 | 260 | XMLBWT-00-0000-000BT50F4 | XMLBWT-00-0000-000LT50F4 | |
| | | T4 | 240 | | XMLBWT-00-0000-000LT40F4 | |
| E4 | 4500 K | U3 | 320 | XMLBWT-00-0000-000BU30E4 | | |
| | | U2 | 300 | XMLBWT-00-0000-000BU20E4 | XMLBWT-00-0000-000LU20E4 | |
| | | T6 | 280 | XMLBWT-00-0000-000BT60E4 | XMLBWT-00-0000-000LT60E4 | |
| | | T5 | 260 | XMLBWT-00-0000-000BT50E4 | XMLBWT-00-0000-000LT50E4 | |
| | | T4 | 240 | | XMLBWT-00-0000-000LT40E4 | |
| F5 | 4250 K | U2 | 300 | XMLBWT-00-0000-000BU20F5 | | |
| | | T6 | 280 | XMLBWT-00-0000-000BT60F5 | XMLBWT-00-0000-000LT60F5 | |
| | | T5 | 260 | XMLBWT-00-0000-000BT50F5 | XMLBWT-00-0000-000LT50F5 | |
| | | T4 | 240 | XMLBWT-00-0000-000BT40F5 | XMLBWT-00-0000-000LT40F5 | |
| E5 | 4000 K | U2 | 300 | XMLBWT-00-0000-000BU20E5 | | |
| | | T6 | 280 | XMLBWT-00-0000-000BT60E5 | XMLBWT-00-0000-000LT60E5 | XMLBWT-00-0000-000HT60E5 |
| | | T5 | 260 | XMLBWT-00-0000-000BT50E5 | XMLBWT-00-0000-000LT50E5 | XMLBWT-00-0000-000HT50E5 |
| | | T4 | 240 | XMLBWT-00-0000-000BT40E5 | XMLBWT-00-0000-000LT40E5 | XMLBWT-00-0000-000HT40E5 |
| | | T3 | 220 | | XMLBWT-00-0000-000LT30E5 | XMLBWT-00-0000-000HT30E5 |
| Z5 | 4000 K | T5 | 260 | | XMLBWT-00-0000-000LT50Z5 | XMLBWT-00-0000-000HT50Z5 |
| | | T4 | 240 | | XMLBWT-00-0000-000LT40Z5 | XMLBWT-00-0000-000HT40Z5 |
| | | T3 | 220 | | XMLBWT-00-0000-000LT30Z5 | XMLBWT-00-0000-000HT30Z5 |

- * Cree XLamp XM Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

STANDARD ORDER CODES AND BINS (XM-L2 ANSI WARM WHITE, T_J = 85 °C)

| XLamp XM-L2 LED Standard Kit Codes - White | | | | | | | |
|--|--------|--------------------------------------|-----------|--------------------------|--------------------------|--------------------------|--------------------------|
| Chromaticity | | Minimum Luminous Flux (lm) @ 700 mA* | | Order Codes | | | |
| Kit | CCT | Code | Flux (lm) | 80 CRI Typical | 80 CRI Minimum | 85 CRI Minimum | 90 CRI Minimum |
| ANSI Warm White (2700 K - 3750 K) | | | | | | | |
| F6 | 3750 K | T6 | 280 | XMLBWT-00-0000-000LT60F6 | XMLBWT-00-0000-000HT60F6 | | |
| | | T5 | 260 | XMLBWT-00-0000-000LT50F6 | XMLBWT-00-0000-000HT50F6 | | |
| | | T4 | 240 | XMLBWT-00-0000-000LT40F6 | XMLBWT-00-0000-000HT40F6 | | |
| | | T3 | 220 | XMLBWT-00-0000-000LT30F6 | XMLBWT-00-0000-000HT30F6 | | |
| | | T2 | 200 | XMLBWT-00-0000-000LT20F6 | XMLBWT-00-0000-000HT20F6 | | |
| E6 | 3500 K | T6 | 280 | XMLBWT-00-0000-000LT60E6 | XMLBWT-00-0000-000HT60E6 | | |
| | | T5 | 260 | XMLBWT-00-0000-000LT50E6 | XMLBWT-00-0000-000HT50E6 | | |
| | | T4 | 240 | XMLBWT-00-0000-000LT40E6 | XMLBWT-00-0000-000HT40E6 | | |
| | | T3 | 220 | XMLBWT-00-0000-000LT30E6 | XMLBWT-00-0000-000HT30E6 | | |
| | | T2 | 200 | XMLBWT-00-0000-000LT20E6 | XMLBWT-00-0000-000HT20E6 | | |
| Z6 | 3500 K | T5 | 260 | XMLBWT-00-0000-000LT50Z6 | XMLBWT-00-0000-000HT50Z6 | | |
| | | T4 | 240 | XMLBWT-00-0000-000LT40Z6 | XMLBWT-00-0000-000HT40Z6 | | |
| | | T3 | 220 | XMLBWT-00-0000-000LT30Z6 | XMLBWT-00-0000-000HT30Z6 | | |
| | | T2 | 200 | XMLBWT-00-0000-000LT20Z6 | XMLBWT-00-0000-000HT20Z6 | | |
| F7 | 3250 K | T5 | 260 | XMLBWT-00-0000-000LT50F7 | XMLBWT-00-0000-000HT50F7 | | |
| | | T4 | 240 | XMLBWT-00-0000-000LT40F7 | XMLBWT-00-0000-000HT40F7 | | |
| | | T3 | 220 | XMLBWT-00-0000-000LT30F7 | XMLBWT-00-0000-000HT30F7 | | |
| | | T2 | 200 | XMLBWT-00-0000-000LT20F7 | XMLBWT-00-0000-000HT20F7 | | |
| E7 | 3000 K | T5 | 260 | XMLBWT-00-0000-000LT50E7 | XMLBWT-00-0000-000HT50E7 | | |
| | | T4 | 240 | XMLBWT-00-0000-000LT40E7 | XMLBWT-00-0000-000HT40E7 | | |
| | | T3 | 220 | XMLBWT-00-0000-000LT30E7 | XMLBWT-00-0000-000HT30E7 | | |
| | | T2 | 200 | XMLBWT-00-0000-000LT20E7 | XMLBWT-00-0000-000HT20E7 | XMLBWT-00-0000-000PT20E7 | XMLBWT-00-0000-000UT20E7 |
| | | S6 | 182 | | | XMLBWT-00-0000-000PS60E7 | XMLBWT-00-0000-000US60E7 |
| | | S5 | 172 | | | XMLBWT-00-0000-000PS50E7 | XMLBWT-00-0000-000US50E7 |
| | | S4 | 164 | | | XMLBWT-00-0000-000PS40E7 | XMLBWT-00-0000-000US40E7 |
| Z7 | 3000 K | T4 | 240 | XMLBWT-00-0000-000LT40Z7 | XMLBWT-00-0000-000HT40Z7 | | |
| | | T3 | 220 | XMLBWT-00-0000-000LT30Z7 | XMLBWT-00-0000-000HT30Z7 | | |
| | | T2 | 200 | XMLBWT-00-0000-000LT20Z7 | XMLBWT-00-0000-000HT20Z7 | | |
| | | S6 | 182 | | | XMLBWT-00-0000-000PS60Z7 | XMLBWT-00-0000-000US60Z7 |
| | | S5 | 172 | | | XMLBWT-00-0000-000PS50Z7 | XMLBWT-00-0000-000US50Z7 |
| | | S4 | 164 | | | XMLBWT-00-0000-000PS40Z7 | XMLBWT-00-0000-000US40Z7 |

- * Cree XLamp XM Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

STANDARD ORDER CODES AND BINS (XM-L2 ANSI WARM WHITE, T_J = 85 °C) - CONTINUED

| XLamp XM-L2 LED Standard Kit Codes - White | | | | | | | |
|--|--------|--------------------------------------|-----------|--------------------------|--------------------------|--------------------------|--------------------------|
| Chromaticity | | Minimum Luminous Flux (lm) @ 700 mA* | | Order Codes | | | |
| Kit | CCT | Code | Flux (lm) | 80 CRI Typical | 80 CRI Minimum | 85 CRI Minimum | 90 CRI Minimum |
| ANSI Warm White (2700 K - 3750 K) | | | | | | | |
| F8 | 2850 K | T5 | 260 | XMLBWT-00-0000-000LT50F8 | XMLBWT-00-0000-000HT50F8 | | |
| | | T4 | 240 | XMLBWT-00-0000-000LT40F8 | XMLBWT-00-0000-000HT40F8 | | |
| | | T3 | 220 | XMLBWT-00-0000-000LT30F8 | XMLBWT-00-0000-000LT30F8 | | |
| | | T2 | 200 | XMLBWT-00-0000-000LT20F8 | XMLBWT-00-0000-000HT20F8 | | |
| | | S6 | 182 | XMLBWT-00-0000-000LS60F8 | XMLBWT-00-0000-000HS60F8 | XMLBWT-00-0000-000PS60F8 | XMLBWT-00-0000-000US60F8 |
| | | S5 | 172 | | | XMLBWT-00-0000-000PS50F8 | XMLBWT-00-0000-000US50F8 |
| | | S4 | 164 | | | XMLBWT-00-0000-000PS40F8 | XMLBWT-00-0000-000US40F8 |
| | | S3 | 156 | | | XMLBWT-00-0000-000PS30F8 | XMLBWT-00-0000-000US30F8 |
| E8 | 2700 K | T5 | 260 | XMLBWT-00-0000-000LT50E8 | XMLBWT-00-0000-000HT50E8 | | |
| | | T4 | 240 | XMLBWT-00-0000-000LT40E8 | XMLBWT-00-0000-000HT40E8 | | |
| | | T3 | 220 | XMLBWT-00-0000-000LT30E8 | XMLBWT-00-0000-000HT30E8 | | |
| | | T2 | 200 | XMLBWT-00-0000-000LT20E8 | XMLBWT-00-0000-000HT20E8 | | |
| | | S6 | 182 | XMLBWT-00-0000-000LS60E8 | XMLBWT-00-0000-000HS60E8 | XMLBWT-00-0000-000PS60E8 | XMLBWT-00-0000-000US60E8 |
| | | S5 | 172 | | | XMLBWT-00-0000-000PS50E8 | XMLBWT-00-0000-000US50E8 |
| | | S4 | 164 | | | XMLBWT-00-0000-000PS40E8 | XMLBWT-00-0000-000US40E8 |
| | | S3 | 156 | | | XMLBWT-00-0000-000PS30E8 | XMLBWT-00-0000-000US30E8 |
| Z8 | 2700 K | T4 | 240 | XMLBWT-00-0000-000LT40Z8 | XMLBWT-00-0000-000HT40Z8 | | |
| | | T3 | 220 | XMLBWT-00-0000-000LT30Z8 | XMLBWT-00-0000-000HT30Z8 | | |
| | | T2 | 200 | XMLBWT-00-0000-000LT20Z8 | XMLBWT-00-0000-000HT20Z8 | | |
| | | S6 | 182 | XMLBWT-00-0000-000LS60Z8 | XMLBWT-00-0000-000HS60Z8 | | |
| | | S5 | 172 | | | XMLBWT-00-0000-000PS50Z8 | XMLBWT-00-0000-000US50Z8 |
| | | S4 | 164 | | | XMLBWT-00-0000-000PS40Z8 | XMLBWT-00-0000-000US40Z8 |
| | | S3 | 156 | | | XMLBWT-00-0000-000PS30Z8 | XMLBWT-00-0000-000US30Z8 |

- * Cree XLamp XM Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

STANDARD ORDER CODES AND BINS (XM-L HIGH VOLTAGE ANSI COOL WHITE, T_J = 85 °C)

| XLamp XM-L HVW LED Standard Order Codes - White | | | | |
|---|--------|-------------------------------------|-----------|--------------------------|
| Chromaticity | | Minimum Luminous Flux (lm) @ 44 mA* | | Order Codes |
| Kit | CCT | Code | Flux (lm) | 65 CRI Typical |
| ANSI Cool White (5000 K – 8300 K) | | | | |
| 51 | 6200 K | T5 | 260 | XMLHVW-Q0-0000-0000LT551 |
| | | T4 | 240 | XMLHVW-Q0-0000-0000LT451 |
| | | T3 | 220 | XMLHVW-Q0-0000-0000LT351 |
| | | T2 | 200 | XMLHVW-Q0-0000-0000LT251 |
| 53 | 6000 K | T5 | 260 | XMLHVW-Q0-0000-0000LT553 |
| | | T4 | 240 | XMLHVW-Q0-0000-0000LT453 |
| | | T3 | 220 | XMLHVW-Q0-0000-0000LT353 |
| | | T2 | 200 | XMLHVW-Q0-0000-0000LT253 |
| 50 | 6200 K | T5 | 260 | XMLHVW-Q0-0000-0000LT550 |
| | | T4 | 240 | XMLHVW-Q0-0000-0000LT450 |
| | | T3 | 220 | XMLHVW-Q0-0000-0000LT350 |
| | | T2 | 200 | XMLHVW-Q0-0000-0000LT250 |

- * Cree XLamp XM Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

STANDARD ORDER CODES AND BINS (XM-L HIGH VOLTAGE ANSI NEUTRAL WHITE, T_J = 85 °C)

| XLamp XM-L HVW LED Standard Kit Codes - White | | | | | |
|---|--------|-------------------------------------|-----------|--------------------------|--------------------------|
| Chromaticity | | Minimum Luminous Flux (lm) @ 44 mA* | | Order Codes | |
| Kit | CCT | Code | Flux (lm) | 75 CRI Typical | 80 CRI Minimum |
| ANSI Neutral White (3700 K – 5000 K) | | | | | |
| E3 | 5000 K | T5 | 260 | XMLHVW-Q0-0000-0000LT5E3 | |
| | | T4 | 240 | XMLHVW-Q0-0000-0000LT4E3 | |
| | | T3 | 220 | XMLHVW-Q0-0000-0000LT3E3 | |
| | | T2 | 200 | XMLHVW-Q0-0000-0000LT2E3 | |
| | | S6 | 182 | XMLHVW-Q0-0000-0000LS6E3 | |
| F4 | 4750 K | T5 | 260 | XMLHVW-Q0-0000-0000LT5F4 | |
| | | T4 | 240 | XMLHVW-Q0-0000-0000LT4F4 | |
| | | T3 | 220 | XMLHVW-Q0-0000-0000LT3F4 | |
| | | T2 | 200 | XMLHVW-Q0-0000-0000LT2F4 | |
| | | S6 | 182 | XMLHVW-Q0-0000-0000LS6F4 | |
| E4 | 4500 K | T5 | 260 | XMLHVW-Q0-0000-0000LT5E4 | |
| | | T4 | 240 | XMLHVW-Q0-0000-0000LT4E4 | |
| | | T3 | 220 | XMLHVW-Q0-0000-0000LT3E4 | |
| | | T2 | 200 | XMLHVW-Q0-0000-0000LT2E4 | |
| | | S6 | 182 | XMLHVW-Q0-0000-0000LS6E4 | |
| F5 | 4250 K | T3 | 220 | XMLHVW-Q0-0000-0000LT3F5 | |
| | | T2 | 200 | XMLHVW-Q0-0000-0000LT2F5 | XMLHVW-Q0-0000-0000HT2F5 |
| | | S6 | 182 | XMLHVW-Q0-0000-0000LS6F5 | XMLHVW-Q0-0000-0000HS6F5 |
| | | S5 | 172 | XMLHVW-Q0-0000-0000LS5F5 | XMLHVW-Q0-0000-0000HS5F5 |
| E5 | 4000 K | T3 | 220 | XMLHVW-Q0-0000-0000LT3E5 | |
| | | T2 | 200 | XMLHVW-Q0-0000-0000LT2E5 | XMLHVW-Q0-0000-0000HT2E5 |
| | | S6 | 182 | XMLHVW-Q0-0000-0000LS6E5 | XMLHVW-Q0-0000-0000HS6E5 |
| | | S5 | 172 | XMLHVW-Q0-0000-0000LS5E5 | XMLHVW-Q0-0000-0000HS5E5 |

- * Cree XLamp XM Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.

STANDARD ORDER CODES AND BINS (XM-L HIGH VOLTAGE ANSI WARM WHITE, T_J = 85 °C)

| XLamp XM-L HVW LED Standard Kit Codes - White | | | | | |
|---|--------|-------------------------------------|-----------|--------------------------|--------------------------|
| Chromaticity | | Minimum Luminous Flux (lm) @ 44 mA* | | Order Codes | |
| Kit | CCT | Code | Flux (lm) | 80 CRI Typical | 80 CRI Minimum |
| ANSI Warm White (2700 K - 3750 K) | | | | | |
| F6 | 3750 K | T3 | 220 | XMLHVW-Q0-0000-0000LT3F6 | |
| | | T2 | 200 | XMLHVW-Q0-0000-0000LT2F6 | XMLHVW-Q0-0000-0000HT2F6 |
| | | S6 | 182 | XMLHVW-Q0-0000-0000LS6F6 | XMLHVW-Q0-0000-0000HS6F6 |
| | | S5 | 172 | XMLHVW-Q0-0000-0000LS5F6 | XMLHVW-Q0-0000-0000HS5F6 |
| | | S4 | 164 | XMLHVW-Q0-0000-0000LS4F6 | XMLHVW-Q0-0000-0000HS4F6 |
| E6 | 3500 K | T3 | 220 | XMLHVW-Q0-0000-0000LT3E6 | |
| | | T2 | 200 | XMLHVW-Q0-0000-0000LT2E6 | XMLHVW-Q0-0000-0000HT2E6 |
| | | S6 | 182 | XMLHVW-Q0-0000-0000LS6E6 | XMLHVW-Q0-0000-0000HS6E6 |
| | | S5 | 172 | XMLHVW-Q0-0000-0000LS5E6 | XMLHVW-Q0-0000-0000HS5E6 |
| | | S4 | 164 | XMLHVW-Q0-0000-0000LS4E6 | XMLHVW-Q0-0000-0000HS4E6 |
| F7 | 3250 K | T3 | 220 | XMLHVW-Q0-0000-0000LT3F7 | |
| | | T2 | 200 | XMLHVW-Q0-0000-0000LT2F7 | XMLHVW-Q0-0000-0000HT2F7 |
| | | S6 | 182 | XMLHVW-Q0-0000-0000LS6F7 | XMLHVW-Q0-0000-0000HS6F7 |
| | | S5 | 172 | XMLHVW-Q0-0000-0000LS5F7 | XMLHVW-Q0-0000-0000HS5F7 |
| | | S4 | 164 | XMLHVW-Q0-0000-0000LS4F7 | XMLHVW-Q0-0000-0000HS4F7 |
| | | S3 | 156 | XMLHVW-Q0-0000-0000LS3F7 | XMLHVW-Q0-0000-0000HS3F7 |
| E7 | 3000 K | T3 | 220 | XMLHVW-Q0-0000-0000LT3E7 | |
| | | T2 | 200 | XMLHVW-Q0-0000-0000LT2E7 | XMLHVW-Q0-0000-0000HT2E7 |
| | | S6 | 182 | XMLHVW-Q0-0000-0000LS6E7 | XMLHVW-Q0-0000-0000HS6E7 |
| | | S5 | 172 | XMLHVW-Q0-0000-0000LS5E7 | XMLHVW-Q0-0000-0000HS5E7 |
| | | S4 | 164 | XMLHVW-Q0-0000-0000LS4E7 | XMLHVW-Q0-0000-0000HS4E7 |
| | | S3 | 156 | XMLHVW-Q0-0000-0000LS3E7 | XMLHVW-Q0-0000-0000HS3E7 |
| F8 | 2850 K | S6 | 182 | XMLHVW-Q0-0000-0000LS6F8 | XMLHVW-Q0-0000-0000HS6F8 |
| | | S5 | 172 | XMLHVW-Q0-0000-0000LS5F8 | XMLHVW-Q0-0000-0000HS5F8 |
| | | S4 | 164 | XMLHVW-Q0-0000-0000LS4F8 | XMLHVW-Q0-0000-0000HS4F8 |
| | | S3 | 156 | XMLHVW-Q0-0000-0000LS3F8 | XMLHVW-Q0-0000-0000HS3F8 |
| | | S2 | 148 | XMLHVW-Q0-0000-0000LS2F8 | XMLHVW-Q0-0000-0000HS2F8 |
| E8 | 2700 K | S6 | 182 | XMLHVW-Q0-0000-0000LS6E8 | XMLHVW-Q0-0000-0000HS6E8 |
| | | S5 | 172 | XMLHVW-Q0-0000-0000LS5E8 | XMLHVW-Q0-0000-0000HS5E8 |
| | | S4 | 164 | XMLHVW-Q0-0000-0000LS4E8 | XMLHVW-Q0-0000-0000HS4E8 |
| | | S3 | 156 | XMLHVW-Q0-0000-0000LS3E8 | XMLHVW-Q0-0000-0000HS3E8 |
| | | S2 | 148 | XMLHVW-Q0-0000-0000LS2E8 | XMLHVW-Q0-0000-0000HS2E8 |

- * Cree XLamp XM Family LED order codes specify only a minimum flux bin and not a maximum. Cree may ship reels in flux bins higher than the minimum specified by the order code without advance notice. Shipments will always adhere to the chromaticity or DWL bin restrictions specified by the order code.