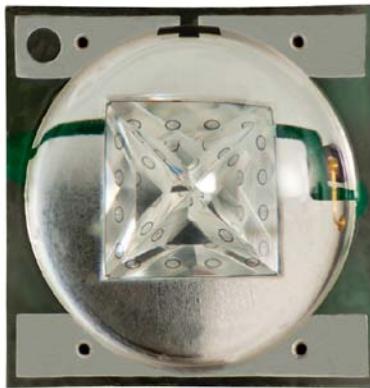
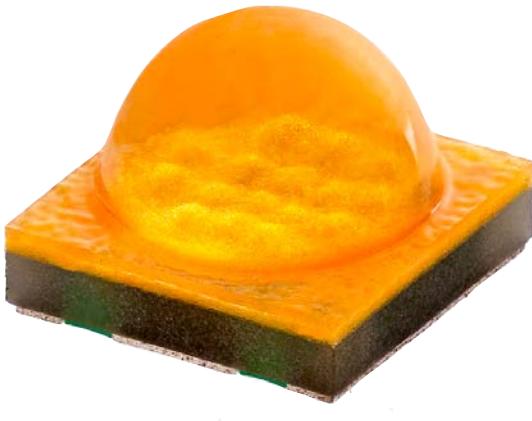


# Cree® XLamp® XT Family LEDs



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## INTRODUCTION

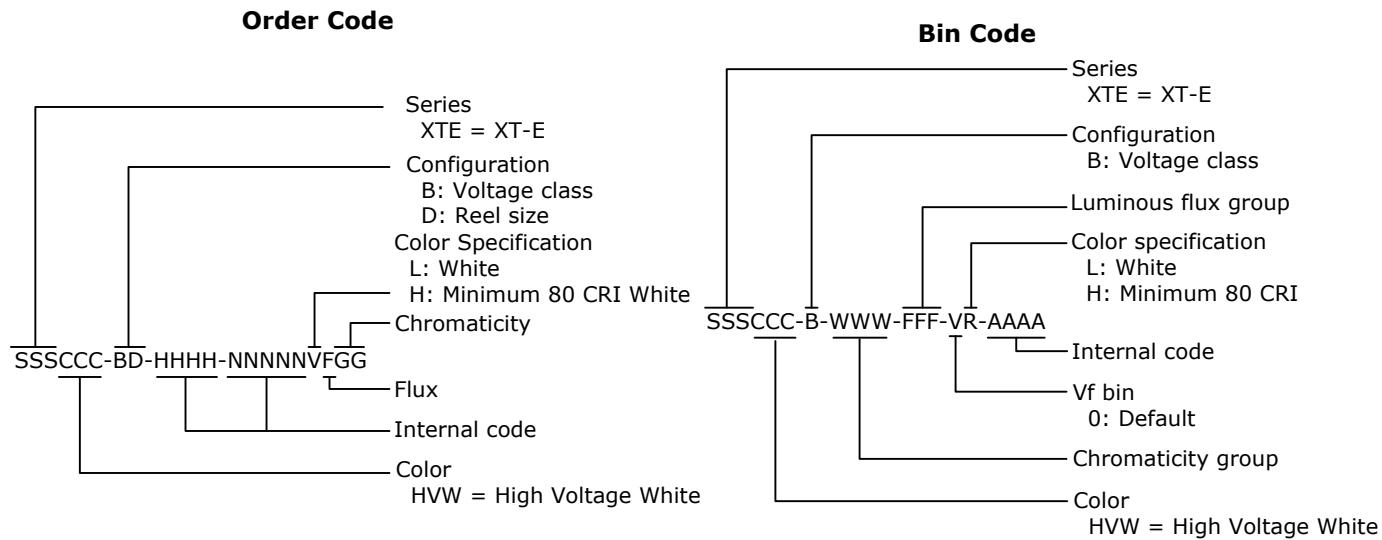
This document describes the product nomenclature required to select and order Cree's XLamp XT Family LEDs. XLamp XT Family LEDs are tested and sorted into bins which are then combined into orderable kits identified by an order code.

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). Color XLamp LEDs are sorted by dominant wavelength (color) and luminous or radiant flux (brightness). LEDs are shipped on reels containing LEDs from one bin and are always labeled with the appropriate bin code.

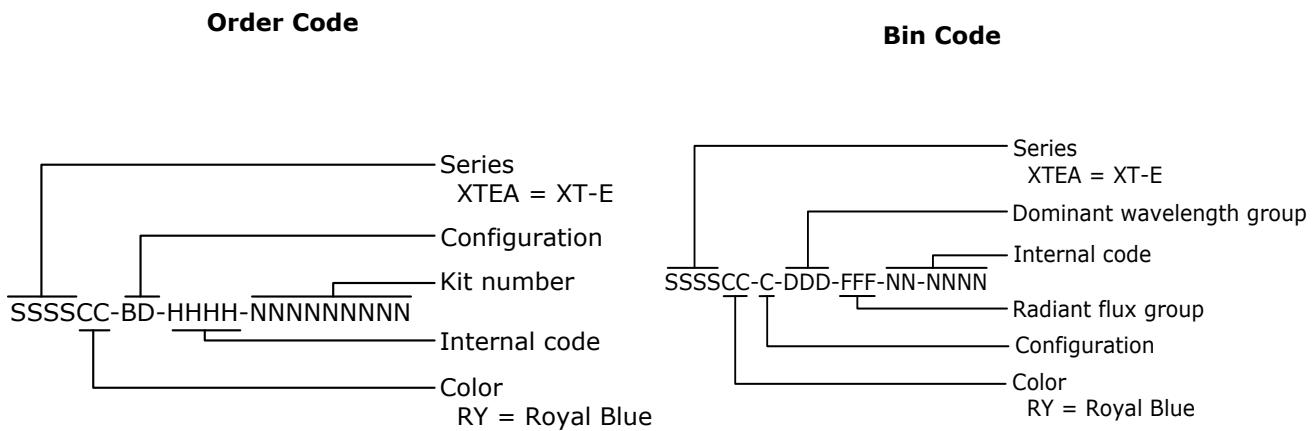
Kits contain LEDs from a number of similar bins and are fully defined by their order codes. A full explanation of the order codes for XLamp XT Family LEDs, as well as a list of standard order codes, is provided in this document.

## BIN AND ORDER-CODE FORMAT

Bin codes and order codes for XT-E High Voltage White are configured in the following manner:



Bin codes and order codes for XT-E Royal Blue are configured as follows:



## PERFORMANCE GROUPS – BRIGHTNESS (T<sub>j</sub> = 85 °C)

XLamp XT High Voltage White LEDs are tested for luminous flux and placed into one of the following luminous-flux groups.

Group Code	Min. Luminous Flux @ 22 mA (lm)	Max. Luminous Flux @ 22 mA (lm)
P2	67.2	73.9
P3	73.9	80.6
P4	80.6	87.4
Q2	87.4	93.9
Q3	93.9	100
Q4	100	107
Q5	107	114
R2	114	122
R3	122	130
R4	130	139
R5	139	148

## PERFORMANCE GROUPS – RADIANT FLUX (T<sub>j</sub> = 85 °C)

XLamp XT-E Royal Blue LEDs are tested for radiant flux and placed into one the following bins.

Group Code	Minimum Radiant Flux (mW)	Maximum Radiant Flux (mW)
31	475	500
32	500	525
33	525	550
34	550	575

## PERFORMANCE GROUPS – DOMINANT WAVELENGTH (T<sub>j</sub> = 85 °C)

XLamp XT-E Royal Blue LEDs are tested for dominant wavelength and placed into one of the regions defined by the following bounding coordinates.

Group Code	Minimum Dominant Wavelength (nm)	Maximum Dominant Wavelength (nm)
D36	450.0	452.5
D37	452.5	455.0
D46	455.0	457.5
D47	457.5	460.0
D56	460.0	462.5
D57	462.5	465.0

**PERFORMANCE GROUPS – FORWARD VOLTAGE ( $T_j = 85^\circ\text{C}$ )**

XLamp XT-E High Voltage White LEDs are tested for forward voltage and placed into one the following voltage bins.

Group Code	Minimum Forward Voltage (V) @ 22 mA	Maximum Forward Voltage (V) @ 22 mA
0	No Vf Bin	
1	40.0	42.5
2	42.5	45.0
3	45.0	47.5
4	47.5	50.0
5	50.0	52.5
6	52.5	55.0

XLamp XT-E Royal Blue LEDs are tested for forward voltage and placed into one the following voltage bins.

Group Code	Minimum Forward Voltage (V)	Maximum Forward Voltage (V)
F	2.75	3.00
G	3.00	3.25
H	3.25	3.50

**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
	0.2980	0.2880		0.2895	0.3135		0.2962	0.3220		0.3037	0.2937
0R	0.2950	0.2970	0S	0.2870	0.3210	0T	0.2937	0.3312	0U	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
	0.3048	0.3207	1B	0.3028	0.3304	1C	0.3115	0.3391	1D	0.3130	0.3290
1A	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)**

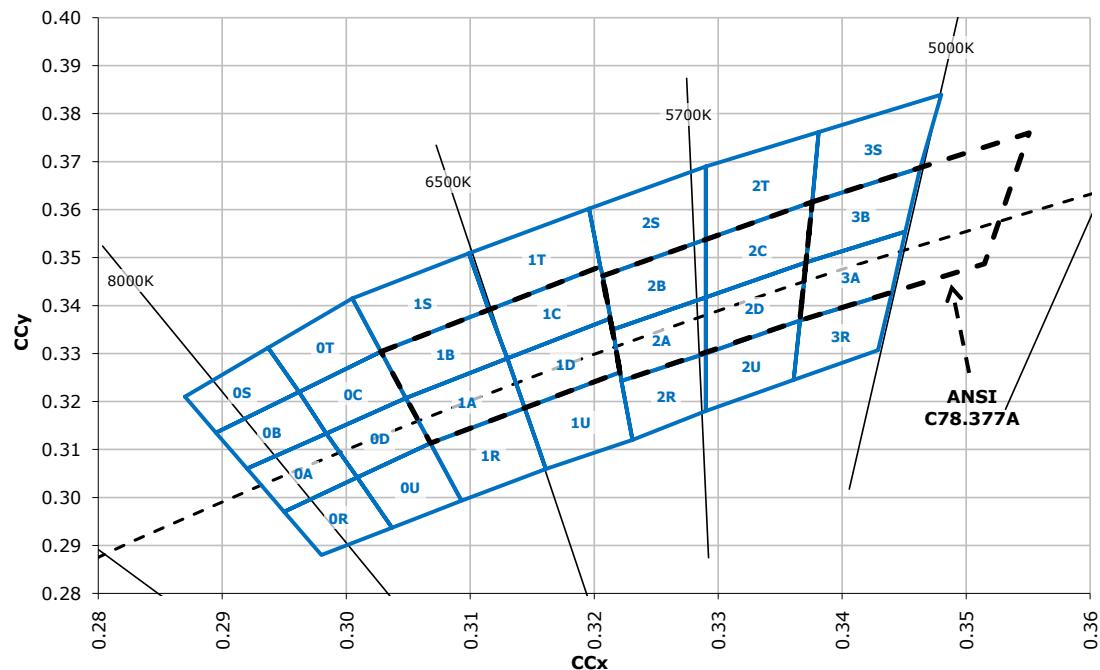
Region	x	y									
5A1	0.3670	0.3578	5A2	0.3686	0.3649	5A3	0.3744	0.3685	5A4	0.3726	0.3612
	0.3686	0.3649		0.3702	0.3722		0.3763	0.3760		0.3744	0.3685
	0.3744	0.3685		0.3763	0.3760		0.3825	0.3798		0.3804	0.3721
	0.3726	0.3612		0.3744	0.3685		0.3804	0.3721		0.3783	0.3646
5B1	0.3702	0.3722	5B2	0.3719	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
5R	0.3670	0.3578	5S	0.3771	0.4034	5T	0.3916	0.4127	5U	0.3783	0.3646
	0.3783	0.3646		0.3916	0.4127		0.4064	0.4221		0.3898	0.3716
	0.3743	0.3502		0.3869	0.3958		0.4006	0.4044		0.3848	0.3565
	0.3640	0.3440		0.3736	0.3874		0.3869	0.3958		0.3743	0.3502
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

**PERFORMANCE GROUPS – CHROMATICITY (CONTINUED)**

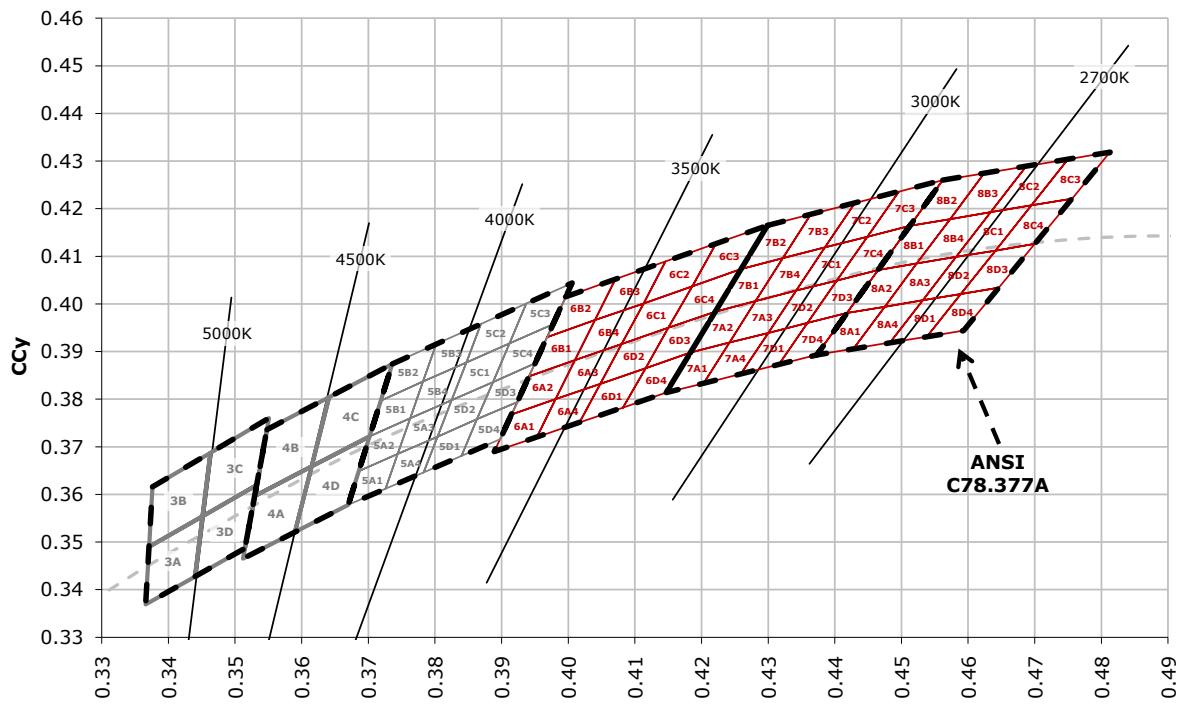
Region	x	y									
6R	0.3889	0.3690	6S	0.4054	0.4191	6T	0.4217	0.4273	6U	0.4017	0.3751
	0.4017	0.3751		0.4217	0.4273		0.4382	0.4356		0.4147	0.3814
	0.3957	0.3596		0.4146	0.4089		0.4299	0.4165		0.4077	0.3652
	0.3840	0.3540		0.3996	0.4015		0.4146	0.4089		0.3957	0.3596
	0.4147	0.3814		0.4183	0.3898		0.4242	0.3919		0.4203	0.3833
7A1	0.4183	0.3898	7A2	0.4221	0.3984	7A3	0.4281	0.4006	7A4	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	0.3853
	0.4221	0.3984	7B2	0.4259	0.4073	7B3	0.4322	0.4096	7B4	0.4281	0.4006
7B1	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
	0.4342	0.4028	7C2	0.4385	0.4119	7C3	0.4449	0.4141	7C4	0.4403	0.4049
7C1	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
	0.4259	0.3853	7D2	0.4300	0.3939	7D3	0.4359	0.3960	7D4	0.4316	0.3873
7D1	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

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

ANSI Cool White



ANSI Neutral White and ANSI Warm White



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

### **STANDARD ORDER CODES AND BINS (XT-E HVW ANSI COOL WHITE, T<sub>j</sub> = 85 °C)**

XLamp XT-E LED Standard Order Codes - White					
Minimum Luminous Flux (lm) @ 22 mA*		Chromaticity Regions			Order Code
Group	Flux (lm)				
ANSI Cool White (5000 K – 8300 K)					
Q4	100	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			
		1A, 1B, 1C, 1D, 1R, 1S, 1T, 1U, 2A, 2B, 2C, 2D, 2R, 2S, 2T, 3A, 3B, 3S			
		1A, 1B, 1C, 1D, 2A, 2B, 2C, 2D			
Q5	107	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			
		1A, 1B, 1C, 1D, 1R, 1S, 1T, 1U, 2A, 2B, 2C, 2D, 2R, 2S, 2T, 3A, 3B, 3S			
		1A, 1B, 1C, 1D, 2A, 2B, 2C, 2D			
R2	114	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			
		1A, 1B, 1C, 1D, 1R, 1S, 1T, 1U, 2A, 2B, 2C, 2D, 2R, 2S, 2T, 3A, 3B, 3S			
		1A, 1B, 1C, 1D, 2A, 2B, 2C, 2D			

### **STANDARD ORDER CODES AND BINS (XT-E HVW NEUTRAL WHITE, T<sub>j</sub> = 85 °C)**

XLamp XT-E LED Standard Order Codes - White					
Minimum Luminous Flux (lm) @ 22 mA*		Chromaticity Regions			Order Code
Group	Flux (lm)				CCT
ANSI Neutral White (3700 K – 5000 K)					
P3	73.9	5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4, 6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4	4C, 4D, 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4	XTEHVW-Q0-0000-00000L8F6	3700 K
P4	80.6	5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4, 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4	5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4	XTEHVW-Q0-0000-00000L9F5	4300 K
		5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4, 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4	5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4	XTEHVW-Q0-0000-00000L9E5	4000 K
		5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4, 6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4	5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4	XTEHVW-Q0-0000-00000L9F6	3700 K
Q2	87.4	4C, 4D, 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4	4C, 4D, 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4	XTEHVW-Q0-0000-00000LAF5	4300 K
		5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4, 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4	5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4, 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4	XTEHVW-Q0-0000-00000LAE5	4000 K
		5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4, 6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4	5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4, 6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4	XTEHVW-Q0-0000-00000LAF6	3700 K
Q3	93.9	3A, 3B, 3C, 3D	3A, 3B, 3C, 3D	XTEHVW-Q0-0000-00000LBE3	5000 K
		3C, 3D, 4A, 4B	3C, 3D, 4A, 4B	XTEHVW-Q0-0000-00000LBF4	4750 K
		4A, 4B, 4C, 4D	4A, 4B, 4C, 4D	XTEHVW-Q0-0000-00000LBE4	4500 K
		4C, 4D, 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4	4C, 4D, 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4	XTEHVW-Q0-0000-00000LBF5	4300 K
		5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4, 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4	5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4, 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4	XTEHVW-Q0-0000-00000LBE5	4000 K
Q4	100	3A, 3B, 3C, 3D	3A, 3B, 3C, 3D	XTEHVW-Q0-0000-00000LCE3	5000 K
		3C, 3D, 4A, 4B	3C, 3D, 4A, 4B	XTEHVW-Q0-0000-00000LCF4	4750 K
		4A, 4B, 4C, 4D	4A, 4B, 4C, 4D	XTEHVW-Q0-0000-00000LCE4	4500 K
Q5	107	3A, 3B, 3C, 3D	3A, 3B, 3C, 3D	XTEHVW-Q0-0000-00000LDE3	5000 K
		3C, 3D, 4A, 4B	3C, 3D, 4A, 4B	XTEHVW-Q0-0000-00000LDF4	4750 K
		4A, 4B, 4C, 4D	4A, 4B, 4C, 4D	XTEHVW-Q0-0000-00000LDE4	4500 K

\* Cree XLamp XP Family 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 (XT-E HVW WARM WHITE, T<sub>j</sub> = 85 °C)**

XLamp XT-E LED Standard Order Codes - White				
Minimum Luminous Flux (Im) @ 22 mA*		Chromaticity Regions	Order Code	CCT
Group	Flux (Im)			
Warm White (2600 K - 3700 K)				
P2	67.2	7C1, 7C2, 7C3, 7C4, 7D1, 7D2, 7D3, 7D4, 8A1, 8A2, 8A3, 8A4, 8B1, 8B2, 8B3, 8B4	XTEHVW-Q0-0000-00000L7F8	2900 K
		8A1, 8A2, 8A3, 8A4, 8B1, 8B2, 8B3, 8B4, 8C1, 8C2, 8C3, 8C4, 8D1, 8D2, 8D3, 8D4	XTEHVW-Q0-0000-00000L7E8	2700 K
P3	73.9	6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4, 6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4	XTEHVW-Q0-0000-00000L8E6	3500 K
		6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4, 7A1, 7A2, 7A3, 7A4, 7B1, 7B2, 7B3, 7B4	XTEHVW-Q0-0000-00000L8F7	3200 K
		7A1, 7A2, 7A3, 7A4, 7B1, 7B2, 7B3, 7B4, 7C1, 7C2, 7C3, 7C4, 7D1, 7D2, 7D3, 7D4	XTEHVW-Q0-0000-00000L8E7	3000 K
		7C1, 7C2, 7C3, 7C4, 7D1, 7D2, 7D3, 7D4, 8A1, 8A2, 8A3, 8A4, 8B1, 8B2, 8B3, 8B4	XTEHVW-Q0-0000-00000L8F8	2900 K
P4	80.6	8A1, 8A2, 8A3, 8A4, 8B1, 8B2, 8B3, 8B4, 8C1, 8C2, 8C3, 8C4, 8D1, 8D2, 8D3, 8D4	XTEHVW-Q0-0000-00000L8E8	2700 K
		6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4, 6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4	XTEHVW-Q0-0000-00000L9E6	3500 K
		6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4, 7A1, 7A2, 7A3, 7A4, 7B1, 7B2, 7B3, 7B4	XTEHVW-Q0-0000-00000L9F7	3200 K
		7A1, 7A2, 7A3, 7A4, 7B1, 7B2, 7B3, 7B4, 7C1, 7C2, 7C3, 7C4, 7D1, 7D2, 7D3, 7D4	XTEHVW-Q0-0000-00000L9E7	3000 K
		7C1, 7C2, 7C3, 7C4, 7D1, 7D2, 7D3, 7D4, 8A1, 8A2, 8A3, 8A4, 8B1, 8B2, 8B3, 8B4	XTEHVW-Q0-0000-00000L9F8	2900 K
Q2	87.4	8A1, 8A2, 8A3, 8A4, 8B1, 8B2, 8B3, 8B4, 8C1, 8C2, 8C3, 8C4, 8D1, 8D2, 8D3, 8D4	XTEHVW-Q0-0000-00000L9E8	2700 K
		6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4, 6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4	XTEHVW-Q0-0000-00000LAE6	3500 K
		6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4, 7A1, 7A2, 7A3, 7A4, 7B1, 7B2, 7B3, 7B4	XTEHVW-Q0-0000-00000LAF7	3200 K
		7A1, 7A2, 7A3, 7A4, 7B1, 7B2, 7B3, 7B4, 7C1, 7C2, 7C3, 7C4, 7D1, 7D2, 7D3, 7D4	XTEHVW-Q0-0000-00000LAE7	3000 K

\* Cree XLamp XT Family 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 (XT-E HVW 80-CRI MINIMUM, WHITE , T<sub>j</sub> = 85 °C)**

XLamp XT-E LED Standard Order Codes - 80-CRI White				
Minimum Luminous Flux (lm) @ 22 mA*		Chromaticity Regions	Order Code	CCT
Group	Flux (lm)			
80-CRI White (2700 K - 4300 K)				
P2	67.2	7C1, 7C2, 7C3, 7C4, 7D1, 7D2, 7D3, 7D4, 8A1, 8A2, 8A3, 8A4, 8B1, 8B2, 8B3, 8B4	XTEHVW-Q0-0000-00000H7F8	2900 K
		8A1, 8A2, 8A3, 8A4, 8B1, 8B2, 8B3, 8B4, 8C1, 8C2, 8C3, 8C4, 8D1, 8D2, 8D3, 8D4	XTEHVW-Q0-0000-00000H7E8	2700 K
P3	73.9	5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4, 6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4	XTEHVW-Q0-0000-00000H8F6	3700 K
		6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4, 6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4	XTEHVW-Q0-0000-00000H8E6	3500 K
		6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4, 7A1, 7A2, 7A3, 7A4, 7B1, 7B2, 7B3, 7B4	XTEHVW-Q0-0000-00000H8F7	3200 K
		7A1, 7A2, 7A3, 7A4, 7B1, 7B2, 7B3, 7B4, 7C1, 7C2, 7C3, 7C4, 7D1, 7D2, 7D3, 7D4	XTEHVW-Q0-0000-00000H8E7	3000 K
		7C1, 7C2, 7C3, 7C4, 7D1, 7D2, 7D3, 7D4, 8A1, 8A2, 8A3, 8A4, 8B1, 8B2, 8B3, 8B4	XTEHVW-Q0-0000-00000H8F8	2900 K
		8A1, 8A2, 8A3, 8A4, 8B1, 8B2, 8B3, 8B4, 8C1, 8C2, 8C3, 8C4, 8D1, 8D2, 8D3, 8D4	XTEHVW-Q0-0000-00000H8E8	2700 K
		4C, 4D, 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4	XTEHVW-Q0-0000-00000H9F5	4300 K
P4	80.6	5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4, 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4	XTEHVW-Q0-0000-00000H9E5	4000 K
		5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4, 6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4	XTEHVW-Q0-0000-00000H9F6	3700 K
		6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4, 6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4	XTEHVW-Q0-0000-00000H9E6	3500 K
		6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4, 7A1, 7A2, 7A3, 7A4, 7B1, 7B2, 7B3, 7B4	XTEHVW-Q0-0000-00000H9F7	3200 K
		7A1, 7A2, 7A3, 7A4, 7B1, 7B2, 7B3, 7B4, 7C1, 7C2, 7C3, 7C4, 7D1, 7D2, 7D3, 7D4	XTEHVW-Q0-0000-00000H9E7	3000 K
		7C1, 7C2, 7C3, 7C4, 7D1, 7D2, 7D3, 7D4, 8A1, 8A2, 8A3, 8A4, 8B1, 8B2, 8B3, 8B4	XTEHVW-Q0-0000-00000H9F8	2900 K
		8A1, 8A2, 8A3, 8A4, 8B1, 8B2, 8B3, 8B4, 8C1, 8C2, 8C3, 8C4, 8D1, 8D2, 8D3, 8D4	XTEHVW-Q0-0000-00000H9E8	2700 K
		4C, 4D, 5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4	XTEHVW-Q0-0000-00000HAF5	4300 K
Q2	87.4	5A1, 5A2, 5A3, 5A4, 5B1, 5B2, 5B3, 5B4, 5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4	XTEHVW-Q0-0000-00000HAE5	4000 K
		5C1, 5C2, 5C3, 5C4, 5D1, 5D2, 5D3, 5D4, 6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4	XTEHVW-Q0-0000-00000HAF6	3700 K
		6A1, 6A2, 6A3, 6A4, 6B1, 6B2, 6B3, 6B4, 6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4	XTEHVW-Q0-0000-00000HAE6	3500 K
		6C1, 6C2, 6C3, 6C4, 6D1, 6D2, 6D3, 6D4, 7A1, 7A2, 7A3, 7A4, 7B1, 7B2, 7B3, 7B4	XTEHVW-Q0-0000-00000HAF7	3200 K
		7A1, 7A2, 7A3, 7A4, 7B1, 7B2, 7B3, 7B4, 7C1, 7C2, 7C3, 7C4, 7D1, 7D2, 7D3, 7D4	XTEHVW-Q0-0000-00000HAE7	3000 K

\* Cree XLamp XT Family 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 (XT-E ROYAL BLUE, T<sub>j</sub> = 85 °C)**

The following table provides order codes for XLamp XT-E Royal Blue LEDs.

Color	Flux	DWL Kit Codes	Dominant Wavelength Range				Order Code, Minimum Radiant Flux @ 350 mA, T <sub>j</sub> =85 °C	
			Min.		Max.			
			Group	DWL (nm)	Group	DWL (nm)		
Royal Blue	475 mW	01	D36	450	D57	465	XTEARY-00-0000-000000K01	
		02	D36	450	D47	460	XTEARY-00-0000-000000K02	
		03	D46	455	D57	465	XTEARY-00-0000-000000K03	
		04	D36	450	D37	455	XTEARY-00-0000-000000K04	
		05	D46	455	D47	460	XTEARY-00-0000-000000K05	
		06	D56	460	D57	465	XTEARY-00-0000-000000K06	
		07	D37	452.5	D46	457.5	XTEARY-00-0000-000000K07	
		08	D47	457.5	D56	462.5	XTEARY-00-0000-000000K08	
		09	D37	452.5	D56	462.5	XTEARY-00-0000-000000K09	
	500 mW	01	D36	450	D57	465	XTEARY-00-0000-000000L01	
		02	D36	450	D47	460	XTEARY-00-0000-000000L02	
		03	D46	455	D57	465	XTEARY-00-0000-000000L03	
		04	D36	450	D37	455	XTEARY-00-0000-000000L04	
		05	D46	455	D47	460	XTEARY-00-0000-000000L05	
		06	D56	460	D57	465	XTEARY-00-0000-000000L06	
		07	D37	452.5	D46	457.5	XTEARY-00-0000-000000L07	
		08	D47	457.5	D56	462.5	XTEARY-00-0000-000000L08	
		09	D37	452.5	D56	462.5	XTEARY-00-0000-000000L09	

Note: Cree maintains a tolerance of ±7% on flux and power measurements.