

Luxeon emitters and stars are graded into multiple "bins". The 4 bins in order are flux (brightness), tint, forward voltage (Vf), and color. Brightness is measured in lumens. Tint is expressed as dominant wavelength or CIE X-Y coordinates. Vf is the voltage drop at typical operating currents. Color is optional.

FLUX		
Lumens		
Code	Min	Max
F	2.9	3.8
G	3.8	4.9
H	4.9	6.3
J	6.3	8.2
K	8.2	10.7
L	10.7	13.9
M	13.9	18.1
N	18.1	23.5
P	23.5	30.6
Q	30.6	39.8
R	39.8	51.7
S	51.7	67.2
S*	60.0	67.2
T	67.2	87.4
U	87.4	113.6
V	113.6	147.7
W	147.7	192.0
X	192.0	249.6
* 3W white HD parts		
royal & dental blue		
Power (mW)		
F	55	70
G	70	85
H	85	115
J	115	145
K	145	175
L	175	225
M	225	275
N	275	355
P	355	435
Q	435	515
R	515	635
S	635	755
T	755	875
U	875	1050
V	1050	1225
W	1225	1400
X	1400	1680

COLOR TINT		
wavelength (nm)		
Code	min	max
<b>amber</b>		
1	584.5	587.0
2	587.0	589.5
4	589.5	592.0
6	592.0	594.5
7	594.5	597.0
<b>red &amp; red-orange</b>		
2	613.5	620.5
4	620.5	631.0
5	631.0	645.0
<b>royal &amp; dental blue</b>		
3	440	445
4	445	450
5	450	455
6	455	460
7	460	465
8	465	470
<b>blue</b>		
1	460	465
2	465	470
3	470	475
4	475	480
5	480	485
6	485	490
<b>cyan</b>		
1	490	495
2	495	500
3	500	505
4	505	510
5	510	515
6	515	520
<b>green</b>		
1	520	525
2	525	530
3	530	535
4	535	540
5	540	545
6	545	550

FORWARD VOLTAGE		
Vf		
Code	Min	Max
E	2.31	2.55
F	2.55	2.79
G	2.79	3.03
H	3.03	3.27
J	3.27	3.51
K	3.51	3.75
L	3.75	3.99
M	3.99	4.23
N	4.23	5.43
R	5.43	5.91
S	5.91	6.39
T	6.39	6.87
U	6.87	7.35
V	7.35	7.83
W	7.83	8.31

COLOR (optional)	
Code	Color
W	White
Y	Royal Blue
Y	Dental Blue
B	Blue
C	Cyan
G	Green
A	Amber
H	Red-Orange
R	Red

EXAMPLES	
<b>TWAK</b>	
Flux	67.2-87.4 lm
Tint	6050° K
Vf	3.51-3.75V
Color	white (implied)

T4MC	
Flux	67.2-87.4 lm
Tint	505-510 nm
Vf	3.99-4.23V
Color	cyan

R4FR	
Flux	39.8-51.7 lm
Tint	620.5-631nm
Vf	2.55-2.79V
Color	red

WARM WHITE TINT	
Code	(°K)
N0	2950
N1	2950
P0	3150
P1	3150
Q0	3370
R0	3640
R1	3500
RA	3500

COOL WHITE TINT	
Code	(°K)
V0	5350
V1	5500
W0	6050
WA	6300
X0	6700
X1	6300
YA	8000
Y0	8000

