

# INTENSITY CODES

## Intensity Code for Standard LEDs (Ta=25°C Tolerance +/-15%)

Bin Code	Light intensity in mcd (IF<15mA)		Bin Code	Light intensity in mcd (IF<15mA)		Bin Code	Light intensity in mcd (IF<15mA)	
	min.	max.		min.	max.		min.	max.
F	0.1	0.2	R	15	20	ZB	550	700
G	0.2	0.35	S	20	30	ZC	700	1000
H	0.35	0.5	T	30	50	ZD	1000	1600
I	0.5	0.8	U	50	80	ZE	1600	2200
K	0.8	1.2	V	80	120	ZF	2200	2800
L	1.2	2	W	120	180	ZG	2800	3400
M	2	4	X	180	250	ZH	3400	4300
N	4	6	Y	250	320	ZM	4300	5200
P	6	10	Z	320	450	ZN	5200	6300
Q	10	15	ZA	450	550	ZP	6300	7400

## Intensity Code for Displays (Ta=25°C Tolerance +/-15%)

Bin Code	Light intensity in ucd (IF≤10mA)		Bin Code	Light intensity in ucd (IF≤10mA)	
	min.	max.		min.	max.
C	70	140	P	14000	21000
D	140	240	Q	21000	31000
E	240	360	R	31000	52000
F	360	560	S	52000	88000
G	560	900	T	88000	150000
H	900	1400	U	150000	255000
I	1400	2200	V	255000	433000
K	2200	3600	W	433000	736000
L	3600	5600	X	736000	1251000
M	5600	9000	Y	1251000	2126000
N	9000	14000	Z	2126000	3614000

## Intensity Code for High Intensity LEDs (Ta=25°C Tolerance +/-15%)

Bin Code	Light intensity in mcd (IF≥15mA)		Bin Code	Light intensity in mcd (IF≥15mA)	
	Min.	Max.		Min.	Max.
A	2	3	ZA	3100	3600
B	3	5	ZB	3600	4200
C	5	8	ZC	4200	5000
D	8	12	ZD	5000	6000
E	12	20	ZE	6000	7000
F	20	40	ZF	7000	8000
G	40	55	ZG	8000	9000
H	55	80	ZH	9000	11000
M	80	120	ZM	11000	14000
N	120	200	ZN	14000	18000
P	200	300	ZP	18000	22000
Q	300	400	ZQ	22000	27000
R	400	500	ZR	27000	35000
S	500	700	ZS	35000	43000
T	700	1000	ZT	43000	55000
U	1000	1300	ZU	55000	75000
V	1300	1600	ZV	75000	130000
W	1600	1900	ZW	130000	200000
X	1900	2300	ZX	200000	320000
Y	2300	2700	ZY	320000	490000
Z	2700	3100	ZZ	490000	800000

## Intensity Codes for High Powered LEDs (Ta=25°C Tolerance: +/-15%)

Bin Code	Luminous Flux in lm		Bin Code	Luminous Flux in lm	
	Min.	Max.		Min.	Max.
A1	0.5	0.6	B10	50	60
A2	0.6	0.7	B11	60	70
A3	0.7	0.8	B12	70	80
A4	0.8	1	B13	80	90
A5	1	1.2	B14	90	100
A6	1.2	1.4	C1	100	120
A7	1.4	1.7	C2	120	140
A8	1.7	2	C3	140	160
A9	2	2.4	C4	160	180
A10	2.4	2.9	C5	180	210
A11	2.9	3.5	C6	210	240
A12	3.5	4.2	C7	240	280
A13	4.2	5	C8	280	320
A14	5	6	C9	320	370
A15	6	7.2	C10	370	430
A16	7.2	8.6	C11	430	490
A17	8.6	10	C12	490	560
B1	10	12	C13	560	640
B2	12	14	C14	640	740
B3	14	17	C15	740	850
B4	17	20	C16	850	1000
B5	20	24	D1	1000	1200
B6	24	29	D2	1200	1400
B7	29	35	D3	1400	1600
B8	35	42	D4	1600	1800
B9	42	50	D5	1800	2100

## INTENSITY CODES

**Code for NPN Phototransistors**  
(Ta=25°C Tolerance +/-15%)

Bin Code	Photocurrent in mA		Bin Code	Photocurrent in mA	
	min.	max.		min.	max.
F	0.1	0.2	L	1.2	2
G	0.2	0.35	M	2	4
H	0.35	0.5	N	4	6
I	0.5	0.8	P	6	10
K	0.8	1.2			

**Code for Infrared Emitting Diodes**  
(Ta=25°C Tolerance +/-15%)

Bin Code	Radiant intensity in mW/sr (IF=20mA)		Bin Code	Radiant intensity in mW/sr (IF=20mA)	
	min.	max.		min.	max.
AK	0.8	1.2	D	8	12
AL	1.2	2	E	12	20
A	2	3	F	20	40
B	3	5	G	40	55
C	5	8	H	55	80

## WAVELENGTH CODES

**Color Code for LEDs and Displays** (Ta=25°C Tolerance: +/-1nm)

Bin Code	Dominant Wavelength in nm							
	Green		Aqua Green		True Green		Yellow	
	min.	max.	min.	max.	min.	max.	min.	max.
0	556	559			510	515		
1	559	561	497	501	515	520	581	584
2	561	563	501	504	520	525	584	586
3	563	565	504	506	525	530	586	588
4	565	567	506	508	530	535	588	590
5	567	569	508	510	535	540	590	592
6	569	571	510	512			592	594
7	571	573	512	515			594	597
8	573	575					597	600

**Color Code for LEDs and Displays** (Ta=25°C Tolerance: +/-1nm)

Bin Code	Dominant Wavelength in nm		Bin Code	Dominant Wavelength in nm	
	Blue			Blue	
	min.	max.		min.	max.
1	445	450	3A	471	473
2	450	455	3B	473	475
3	455	460	4A	475	477
1A	460	463	4B	477	479
1B	463	466	5A	479	481
2A	466	469	5B	481	483
2B	469	471	5C	483	486