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EVERLIGHT provides a diverse product portfolio consisting of High Power LEDs, SMD LEDs, Lamps, Lighting Components, LED Lighting Modules, Digital Displays, Opto-couplers and Infrared Components for various applications. Today, EVERLIGHT is a global company with over 6,400 employees based in China, Hong Kong, Japan, Korea, Singapore, Malaysia, India, Germany and U.S.A.

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## Brightness Groups

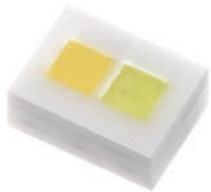
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# Multi Color Application Automotive



**Multi Color Application**



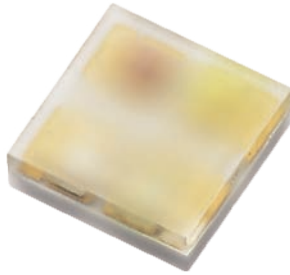
Qualification: According to AEC-Q101

Product Family	EL Micro Multi	Light Color	WW / CW
Part number	CH1216	Brightness @Test current	WW:20lm @80mA CW: 20lm @80mA Yellow: 15lm@80mA Red: 10lm@80mA Green: 5lm@80mA Blue: 5lm@80mA Orange: 10lm@80mA
Dimension LxWxH mm	1.2x1.6x0.7	Application	Ambient Lighting
<b>Features</b>			
Enhanced Corrosion Robustness			
Ceramic Package			
ESD Protection 8KV			
Topr= -40~+125°C			
View angle 120°			

Structure and material depend on customer request.



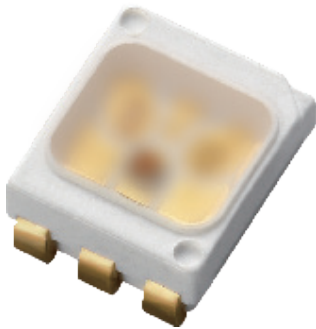
## Multi Color Application



Qualification: According to AEC-Q101

Product Family	EL Multi Color	Light Color	RGBW / RGBY
Part number	CH2525	Brightness (lm) @Test current	R: 2.5-5lm @80mA G: 7.5-10lm @80mA B: 1.3-2.5lm @80mA W: 7.5-10lm @80mA Y: 5-7.5lm @80mA
Dimension LxWxH mm	2.5x2.5x0.75	Application	Ambient Lighting
<b>Features</b>			
Enhanced Corrosion Robustness			
Ceramic Package			
Customised color combination			
Max Current 100mA			
View angle 120°			

Structure and material depend on customer request.



Qualification: According to AEC-Q101

Product Family	EL Top View RGB	Light Color	RGB
Part number	67-63	Brightness @Test current	R: 560-1120mcd @20mA G: 1120-2240mcd @20mA B: 180-560mcd @20mA
Dimension LxWxH mm	3.5x2.8x1.4	Application	Switch indicators LCD Back Lighting (GPS, DVD player) Ambient Lighting
<b>Features</b>			
Enhanced Corrosion Robustness			
PLCC-6 Package			
ESD Protection 2KV			
Topr= -40--+110°C			
View angle 120°			

Structure and material depend on customer request.



**Cluster/  
Switch  
Backlight  
Automotive**





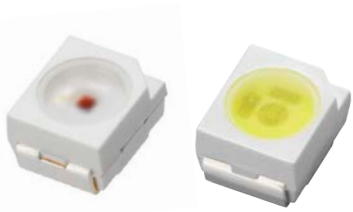
## Cluster/ Switch Backlight



Qualification: According to AEC-Q101

Product Family	EL Mini Top View	Light Color	R / G / B / Y / SkyBlue / IceBlue / W
Part number	65-11	Brightness @Test current	R: 710-1400mcd @20mA
	65-21		G: 710-1400mcd @20mA
Dimension LxWxH mm	2.2x1.4x1.35	Application	B: 224-560mcd @20mA
			Y: 710-1400mcd @20mA
			SkyBlue: 224-560mcd @10mA
			IceBlue: 224-710mcd @10mA
			W: 1400-3550mcd @20mA
<b>Features</b>			
Enhanced Corrosion Robustness Available			
PLCC-2 Package			
ESD Protection 2KV			
Topr= -40~+110°C			
View angle 120°			

Structure and material depend on customer request.



Qualification: According to AEC-Q101

Product Family	EL Top View	Light Color	R / G / B / Y / SkyBlue / IceBlue / W
Part number	67-11	Brightness @Test current	R: 710-1400mcd @20mA
	67-21		G: 710-1400mcd @20mA
Dimension LxWxH mm	3.5x2.8x1.8	Application	B: 224-560mcd @20mA
			Y: 710-1400mcd @20mA
			SkyBlue: 224-560mcd @10mA
			IceBlue: 224-710mcd @10mA
			W: 1400-3550mcd @20mA
<b>Features</b>			
Enhanced Corrosion Robustness Available			
RoHS Compliant			
PLCC-2 Package			
ESD Protection 2KV			
Topr= -40~+110°C			
View angle 120°			

Structure and material depend on customer request.



## Cluster/ Switch Backlight



Qualification: According to AEC-Q101

Product Family	EL Side View	Light Color	R / B / Y / IceBlue / W
Part number	57-11 57-21	Brightness @Test current	R: 710-1400mcd @20mA B: 224-560mcd @20mA Y: 710-1400mcd @20mA IceBlue: 224-710mcd @10mA W: 1120-2800mcd @20mA
Dimension LxWxH mm	4.0x4.0x3.6	Application	Car Infotainment Dashboard Switch Indicators LCD Back Lighting (GPS, DVD Player) Ambient Lighting
<b>Features</b>			
RoHS Compliant			
ESD Protection 2KV			
Topr -40~+110°C			
View angle 120°			

Structure and material depend on customer request.

## Cluster/ Switch bottom Backlight



Qualification: According to AEC-Q101

Product Family	EL Side View	Light Color	W / B / Y / G / R / YG
Part number	3011	Brightness @Test current	W: 900-1800mcd @20mA B: 224-450mcd @20mA Y: 710-1120mcd @20mA G: 710-1120mcd @20mA R: 710-1120mcd @20mA YG: 710-1120mcd @20mA
Dimension LxWxH mm	3.0x1.1x1.2	Application	Dashboard Switch
<b>Features</b>			
Enhanced Corrosion Robustness			
RoHS Compliant			
PLCC-2 Package			
ESD Protection 2KV			
Topr= -40~+110°C			
View angle 120°			

Structure and material depend on customer request.





## Reading lamp / White ambient lighting



Qualification: According to AEC-Q101

Product Family	EL 5630	Light Color	White
Part number	62-117D	Brightness @ Test current	White: 24-40lm @65mA
Dimension LxWxH mm	5.6x3.0x0.65	Application	Interior Lighting Reading Light

Features			
RoHS Compliant			
Available with CRI 80 or CRI 90			
ESD Protection			
Topr= -40~+110°C			
View angle 120°			

Structure and material depend on customer request.



Qualification: According to AEC-Q101

Product Family	EL 2835	Light Color	White
Part number	67-11S	Brightness (lm) @ Test current	12-35lm@60mA
Dimension LxWxH mm	2.8x3.5x0.7	Application	Car Infotainment Dashboard Switch indicators LCD Back Lighting (GPS, DVD player) Ambient Lighting

Features			
Enhanced corrosion Robustness available			
PLCC-2 with improved thermal resistance			
Available with CRI 80 or CRI 90			
Topr= -40~+110°C			
View angle 120°			

Structure and material depend on customer request.

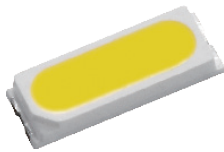
## Interior Application-Automotive TFT Backlight



Qualification: According to AEC-Q101

Product Family	EL Top View 4014	Light Color	W
Part number	50-315Z	Brightness (lm) @Test current	20lm@60mA
Dimension LxWxH mm	4.0x1.4x0.65	Application	Back Lighting
<b>Features</b>			
RoHS Compliant			
PLCC Package			
ESD Protection 2KV			
Topr= -40~110°C			
View angle 120°			

Structure and material depend on customer request.



Qualification: According to AEC-Q101

Product Family	EL Top View 3014	Light Color	W
Part number	3014U	Brightness (lm) @Test current	28lm@80mA
Dimension LxWxH mm	4.0x1.4x0.65	Application	Back Lighting
<b>Features</b>			
RoHS Compliant			
PLCC Package			
ESD Protection 2KV			
Topr= -40~110°C			
View angle 120°			

Structure and material depend on customer request.



**Exterior  
Application  
Automotive**

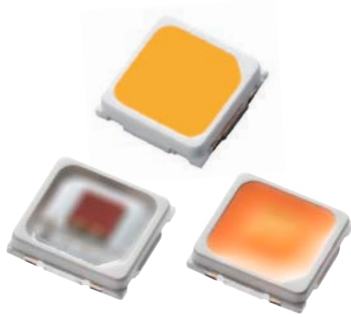


Qualification: According to AEC-Q101

<b>Product Family</b>	EL Compact Eco	<b>Light Color</b>	W / R / Phosphor Yellow
<b>Part number</b>	CH2016	<b>Brightness (lm) @Test current</b>	W: 160-225lm @700mA R: 60-130 @700mA Phosphor Yellow: 100-180 @700mA
<b>Dimension LxWxH mm</b>	2.04x1.64x0.75	<b>Application</b>	DRL Fog Lamp Turning Light Stop Light

Features	
Enhanced Corrosion Robustness	
Ceramic Package	
ESD Protection 8KV	
Topr= -40~+125°C	
View angle 120°	
Tj Max= 150°C	

Structure and material depend on customer request.



Qualification: According to AEC-Q101

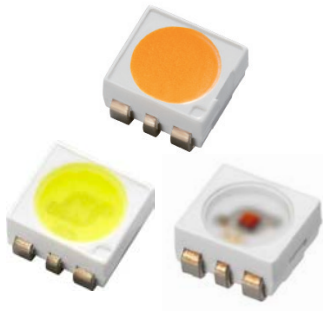
<b>Product Family</b>	EL3030E	<b>Light Color</b>	W / R / Phosphor Yellow
<b>Part number</b>	XI3030	<b>Brightness (lm) @Test current</b>	W: 100-140lm @350mA R: 39-70lm @350mA Phosphor Yellow: 80-100lm @350mA
<b>Dimension LxWxH mm</b>	3.0x3.0x0.8	<b>Application</b>	DRL Fog Lamp Stop Lamp Turning Light

Features	
RoHS Compliant	
EMC Package	
ESD Protection 8KV	
Topr= -40~+125°C	
View angle 120°	
Tj Max= 150°C	
High Power Package based on EMC	

Structure and material depend on customer request.



## Exterior Application

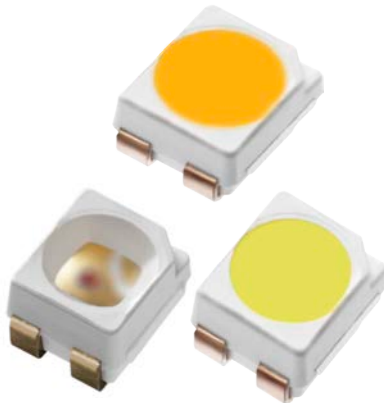


Qualification: According to AEC-Q101

<b>Product Family</b>	EL Advanced Power Top View	<b>Light Color</b>	W / R / Phosphor Yellow / Yellow / Super Red
<b>Part number</b>	A09K	<b>Brightness @Test current</b>	W: 7100-14000mcd @150mA R: 4500-9000mcd @150mA Phosphor Yellow: 5600-11200mcd @150mA Yellow: 3550-7100mcd @150mA Super Red: 2800-7100mcd @150mA
<b>Dimension LxWxH mm</b>	3.4x3.0x1.8	<b>Application</b>	Position Lamp Stop Lamp Turning Light CHMSL

<b>Features</b>			
Enhanced Corrosion Robustness			
RoHS Compliant			
ESD Protection 8KV			
Topr= -40~+110°C			
View angle 120°			

Structure and material depend on customer request.



Qualification: According to AEC-Q101

<b>Product Family</b>	EL Power Top View	<b>Light Color</b>	W / R / Y / SR
<b>Part number</b>	67-41	<b>Brightness @Test current</b>	W: 2240-4500mcd @30mA R: 1800-4500mcd @50mA Y: 1800-4500mcd @50mA SR: 1800-3550mcd @50mA
<b>Dimension LxWxH mm</b>	3.5x2.8x1.85	<b>Application</b>	Turning Light Stop Lamp

<b>Features</b>			
Enhanced Corrosion Robustness			
RoHS Compliant			
ESD Protection 8KV			
Topr= -40~+110°C			
View angle 120°			

Structure and material depend on customer request.



Qualification: According to AEC-Q101

<b>Product Family</b>	EL Power Top View Lens	<b>Light Color</b>	Red / Yellow
<b>Part number</b>	67-31EP	<b>Brightness @Test current</b>	Y: 12000mcd @50mA (30°) Y: 6000mcd @50mA (60°) R: 13000mcd @50mA (30°) R: 7500mcd @50mA (60°)
<b>Dimension LxWxH mm</b>	3.5x2.8x3.33	<b>Application</b>	Stop Lamp Tail Lamp Turn Signal

<b>Features</b>			
Enhanced Corrosion Robustness			
RoHS Compliant			
ESD Protection 8KV			
Topr= -40~+110°C			
View angle 120°			

Structure and material depend on customer request.

## Exterior Application



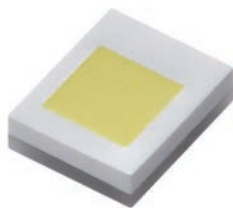
Qualification: According to AEC-Q101

Product Family	EL 2032	Light Color	CW / Phosphor Yellow
Part number	CH 2032	Brightness (lm) @Test current	CW: 91-140lm @350mA Phosphor Yellow: 60-90lm @350mA
Dimension LxWxH mm	2.0x3.2x0.75	Application	DRL Turning Light

### Features

Enhanced Corrosion Robustness
RoHS Compliant
Ceramic Package
ESD Protection 8KV
Topr= -40~+125°C
View angle 120°
Tj Max= 150°C

Structure and material depend on customer request.



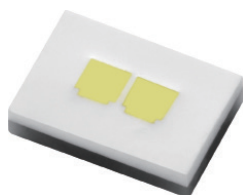
Qualification: According to AEC-Q101

Product Family	EL ALFS	Light Color	W
Part number	ALFS1A	Brightness (lm) @Test current	W: 200-300lm @1000mA
Dimension LxWxH mm	2.0x1.6x0.81	Application	DRL Head Lamp

### Features

Enhanced Corrosion Robustness
RoHS Compliant
Ceramic Package
ESD Protection 15KV
Topr= -40~+125°C
View angle 120°
Tj Max= 150°C

Structure and material depend on customer request.



Qualification: According to AEC-Q101

Product Family	EL ALFS	Light Color	W
Part number	ALFS2A	Brightness (lm) @Test current	450-800lm @1000mA
Dimension LxWxH mm	3.7x2.93x0.99	Application	Head Lamp

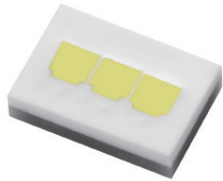
### Features

Enhanced Corrosion Robustness
RoHS Compliant
Ceramic Package
ESD Protection 15KV
Topr= -40~+125°C
View angle 120°
Tj Max= 150°C

Structure and material depend on customer request.



## Exterior Application



Qualification: According to AEC-Q101

Product Family	EL ALFS	Light Color	W
Part number	ALFS3A	Brightness (lm) @Test current	600-1350lm @1000mA
Dimension LxWxH mm	4.28x2.93x0.99	Application	Head Lamp

### Features

Enhanced Corrosion Robustness

RoHS Compliant

Ceramic Package

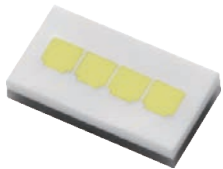
ESD Protection 15KV

Topr= -40~+125°C

View angle 120°

Tj Max= 150°C

Structure and material depend on customer request.



Qualification: According to AEC-Q101

Product Family	EL ALFS	Light Color	W
Part number	ALFS4A	Brightness (lm) @Test current	1000-1650lm @1000mA
Dimension LxWxH mm	5.37x2.93x0.99	Application	Head Lamp

### Features

Enhanced Corrosion Robustness

RoHS Compliant

Ceramic Package

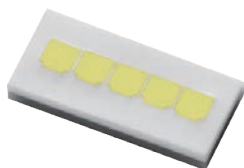
ESD Protection 15KV

Topr= -40~+125°C

View angle 120°

Tj Max= 150°C

Structure and material depend on customer request.



Qualification: According to AEC-Q101

Product Family	EL ALFS	Light Color	W
Part number	ALFS5A	Brightness (lm) @Test current	1100-2200lm @1000mA
Dimension LxWxH mm	6.45x2.93x0.99	Application	Head Lamp

### Features

Enhanced Corrosion Robustness

RoHS Compliant

Ceramic Package

ESD Protection 15KV

Topr= -40~+125°C

View angle 120°

Tj Max= 150°C

Structure and material depend on customer request.



# Driver Assistance, IR, Sensor Application Automotive







## IR-Emitters

### IR12-21C / TR8

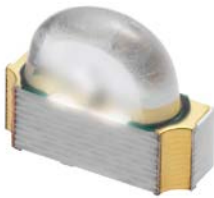


Qualification: According to AEC-Q101

Size (LxWxH mm)	3x1x2	Range of Spectral Bandwidth	45 nm
$\lambda_p$ (nm)	940	le_Type (mW/sr)	0.8@20mA
$V_F$ Max (V)	1.5	Viewing Angle (°)	150
le_Min (mW/sr)	0.5		

Structure and material depend on customer request.

### IR26-91C / L510 / 2D

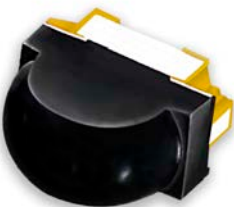


Qualification: According to AEC-Q101

Size (LxWxH mm)	3x1x2.43	Range of Spectral Bandwidth	45 nm
$\lambda_p$ (nm)	940	le_Type (mW/sr)	8@20mA
$V_F$ Max (V)	1.5	Viewing Angle (°)	X:130 Y:20
le_Min (mW/sr)	8		

Structure and material depend on customer request.

### HIR83-01B / 2G



Qualification: According to AEC-Q101

Size (LxWxH mm)	1.6x0.8x1.52	Range of Spectral Bandwidth	30 nm
$\lambda_p$ (nm)	850	le_Type (mW/sr)	5@20mA
$V_F$ Max (V)	1.7	Viewing Angle (°)	X:100 Y:40
le_Min (mW/sr)	2		

Structure and material depend on customer request.



## IR-Detector

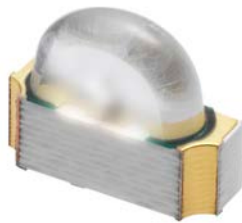


Qualification: According to AEC-Q101

PD12-21B / L458 / TR8

Size (LxWxH mm)	3x1x2	I <sub>L</sub> Typ (μA)	1.5
λ <sub>p</sub> (nm)	940	BVR_Min.(V)	33
I <sub>L</sub> Min (μA)	0.7	ID_Max (nA)	10
Viewing Angle (°)	150	Range of Spectral Bandwidth	730~1050 nm

Structure and material depend on customer request.

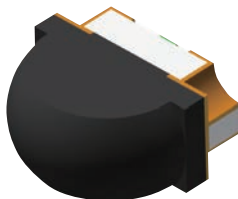


Qualification: According to AEC-Q101

PD26-91B / L458 / 2C

Size (LxWxH mm)	3x1x2.43	I <sub>L</sub> Typ (μA)	2
λ <sub>p</sub> (nm)	900	BVR_Min.(V)	33
I <sub>L</sub> Min (μA)	2	ID_Max (nA)	10
Viewing Angle (°)	X:150 Y:60	Range of Spectral Bandwidth	730~1100 nm

Structure and material depend on customer request.



Qualification: According to AEC-Q101

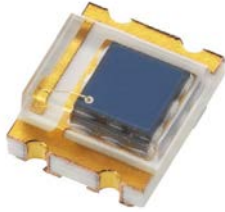
PD83-01B / L458 / 2G

Size (LxWxH mm)	1.6x0.8x1.52	I <sub>L</sub> Typ (μA)	2.4
λ <sub>p</sub> (nm)	940	BVR_Min.(V)	32
I <sub>L</sub> Min (μA)	1.14	ID_Max (nA)	10
Viewing Angle (°)	X:90 Y:50	Range of Spectral Bandwidth	760~1100 nm

Structure and material depend on customer request.



## IR-Detector

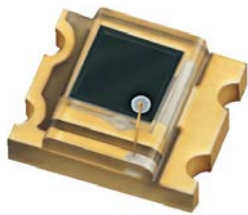


Qualification: According to AEC-Q101

PD1522B / TR8

Size (LxWxH mm)	3.2x2.7x1.1	$I_L$ Typ ( $\mu$ A)	6.5
$\lambda_p$ (nm)	940	BVR_Min.(V)	32
$I_L$ Min ( $\mu$ A)	4.2	ID_Max (nA)	10
Viewing Angle ( $^\circ$ )	130	Range of Spectral Bandwidth	730~1100 nm

Structure and material depend on customer request.

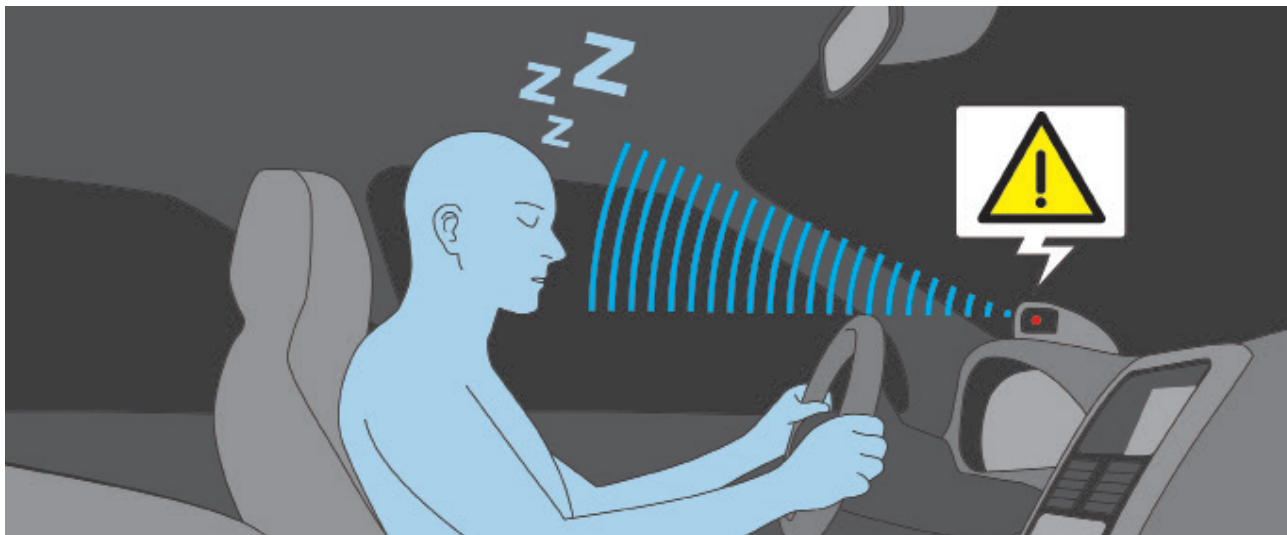


Qualification: According to AEC-Q101

PD1522C / TR8

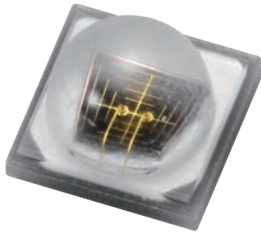
Size (LxWxH mm)	3.2x2.7x1.1	$I_L$ Typ ( $\mu$ A)	6.5
$\lambda_p$ (nm)	940	BVR_Min.(V)	32
$I_L$ Min ( $\mu$ A)	4.2	ID_Max (nA)	10
Viewing Angle ( $^\circ$ )	130	Range of Spectral Bandwidth	400~1100 nm

Structure and material depend on customer request.



## ADAS Application

### HIR-C19D-1N90 / L558-P03 / TR

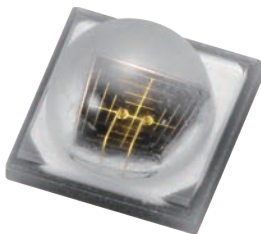


Qualification: According to AEC-Q101

Size (LxWxH mm)	3.5x3.5x2.36	le_Typ (mW/sr) (If = 350mA)	170
$\lambda_p$ (nm)	850	Power_Typ (mW) (If = 350mA)	350
VF_Typ (V) (If = 350mA)	3.1	Viewing Angle (°)	90 / 150

Structure and material depend on customer request.

### IR-C19D-N90 / L562-P03 / TR



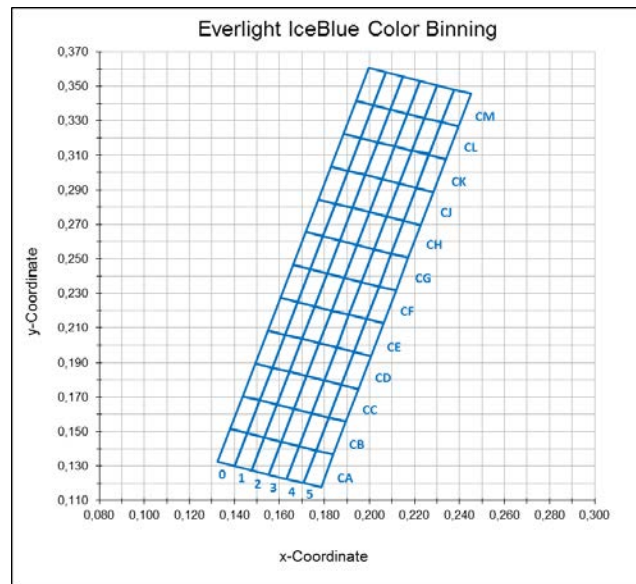
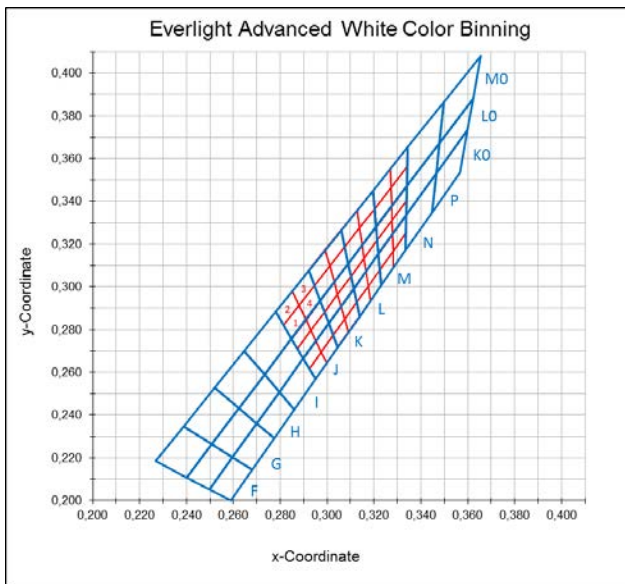
Qualification: According to AEC-Q101

Size (LxWxH mm)	3.5x3.5x2.36	le_Typ (mW/sr) (If = 350mA)	170
$\lambda_p$ (nm)	940	Power_Typ (mW) (If = 350mA)	370
VF_Typ (V) (If = 350mA)	3.1	Viewing Angle (°)	90 / 150

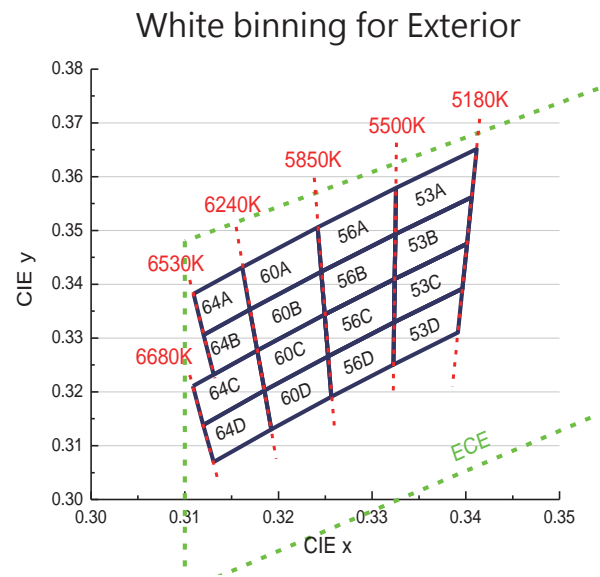
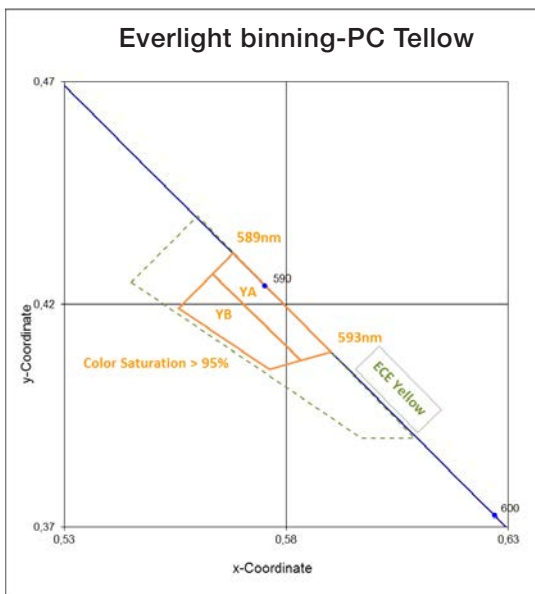
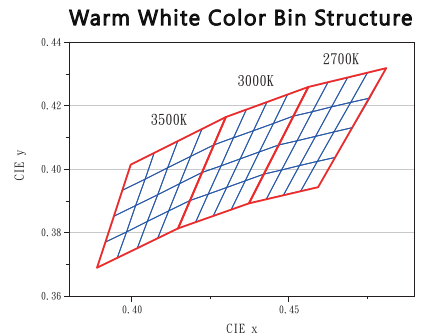
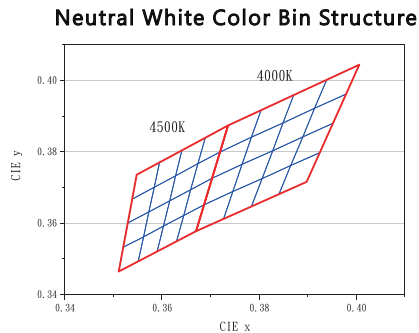
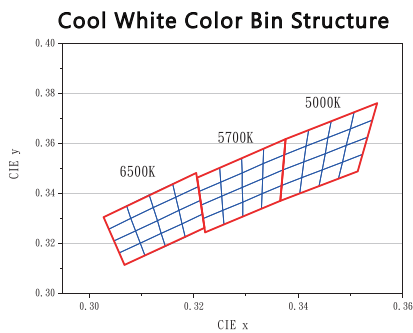
Structure and material depend on customer request.



## Everlight binning-cluster/Switch backlight



## Everlight binning-Ambient White





## Brightness Groups

### Low- and Mid Power LED

Brightness Group	$I_v$ min. [mcd]	$I_v$ typ. [mcd]	$I_v$ max. [mcd]
H1	2,8	3,18	3,55
H2	3,55	4,03	4,5
J1	4,5	5,05	5,6
J2	5,6	6,35	7,1
K1	7,1	8,05	9
K2	9	10,1	11,2
L1	11,2	12,6	14
L2	14	16	18
M1	18	20,2	22,4
M2	22,4	25,2	28
N1	28	31,75	35,5
N2	35,5	40,25	45
P1	45	50,5	56
P2	56	63,5	71
Q1	71	80,5	90
Q2	90	101	112
R1	112	126	140
R2	140	160	180
S1	180	202	224
S2	224	252	280
T1	280	317,5	355
T2	355	402,5	450
U1	450	505	560
U2	560	635	710
V1	710	805	900
V2	900	1.010	1.120
AA	1.120	1.260	1.400
AB	1.400	1.600	1.800
BA	1.800	2.020	2.240
BB	2.240	2.520	2.800
CA	2.800	3.175	3.550
CB	3.550	4.025	4.500
DA	4.501	5.051	5.600
DB	5.600	6.351	7.101
EA	7.100	8.050	9.000
EB	9.000	10.100	11.200
FA	11.200	12.600	14.000
FB	14.000	16.000	18.000

### High Power LED

Brightness Group	$I_v$ min. [lm]	$I_v$ typ. [lm]	$I_v$ max. [mcd]
E1	4	4,5	5
E2	5	5,5	6
E3	6	7	8
E4	8	9	10
E5	10	11,5	13
E6	13	15	17
E7	17	18,5	20
E8	20	21,5	23
E9	23	25	27
F1	27	30	33
F2	33	36	39
F3	39	42	45
F4	45	48,5	52
F5	52	56	60
F6	60	65	70
F7	70	75	80
F8	80	85	90
F9	90	95	100
J1	100	105	110
J2	110	115	120
J3	120	125	130
J4	130	135	140
J5	140	145	150
J6	150	155	160
J7	160	170	180
J8	180	190	200
J9	200	212,5	225
K1	225	237,5	250
K2	250	262,5	275
K3	275	287,5	300
K4	300	312,5	325
K5	325	337,5	350
K6	350	362,5	375
K7	375	387,5	400
K8	400	412,5	425
K9	425	437,5	450

### ALFS Products

Group	Bin	Minimum Photometric Flux [lm]	Maximum Photometric Flux [lm]	
1 Chip	J	1	100	110
		2	110	120
		3	120	130
		4	130	140
		5	140	150
		6	150	160
		7	160	180
		8	180	200
		9	200	225
	K	1	225	250
		2	250	275
		3	275	300
		4	300	325
		5	325	350
		6	350	375
		7	375	400
		8	400	425
		9	425	450
2 Chip	L	1	300	325
		2	325	350
		3	350	375
		4	375	400
		5	400	425
		6	425	450
		7	450	475
		8	475	500
		9	500	525
	M	1	525	550
		2	550	575
		3	575	600
		4	600	625
		5	625	650
		6	650	675
		7	675	700
		8	700	725
		9	725	750
3 Chip	N	1	300	350
		2	350	400
		3	400	450
		4	450	500
		5	500	550
		6	550	600
		7	600	650
		8	650	700
		9	700	750
	O	1	750	800
		2	800	850
		3	850	900
		4	900	950
		5	950	1000
		6	1000	1050
		7	1050	1100
		8	1100	1150
		9	1150	1200
4 Chip	P	1	800	900
		2	900	1000
		3	1000	1100
		4	1100	1200
		5	1200	1300
		6	1300	1400
		7	1400	1500
		8	1500	1600
		9	1600	1700
5 Chip	Q	1	1000	1100
		2	1100	1200
		3	1200	1300
		4	1300	1400
		5	1400	1500
		6	1500	1600
		7	1600	1700
		8	1700	1800
		9	1800	1900