



ProLight

Manufacturer of LED
Packaging from Taiwan

CATALOG 2015-2016

Perfection Through
Dedication on LED Packaging

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About ProLight

ProLight Opto Technology was established in 2004, dedicated to the LED research, development and manufacturing for lighting application. ProLight has its own exclusive phosphor coating and packaging technology, which can provide the best optics and heat dissipation for lighting.

ProLight is a customer-driven company providing professional ODM service that brings the highest standard of quality for tailor-made LED products. As a result, through our service we want to contribute the best value to the customer.

ProLight's vision is to be the world class LED lighting supplier, and contribute to the protection of Earth by eco-friendly LED lighting.



Milestone

SINCE 2004

100%
ENVIRONMENTAL
STANDARD

100%
EXACT
PRODUCT SPEC

LM80

**HIGH
QUALITY**

» 2015

- Announced 1616 CSP(Chip Scale Package).
- Announced 365nm LED to enter curing application.
- Announce new generation COB LED with 2-step MacAdam Ellipse to provide the best color uniformity.

2014

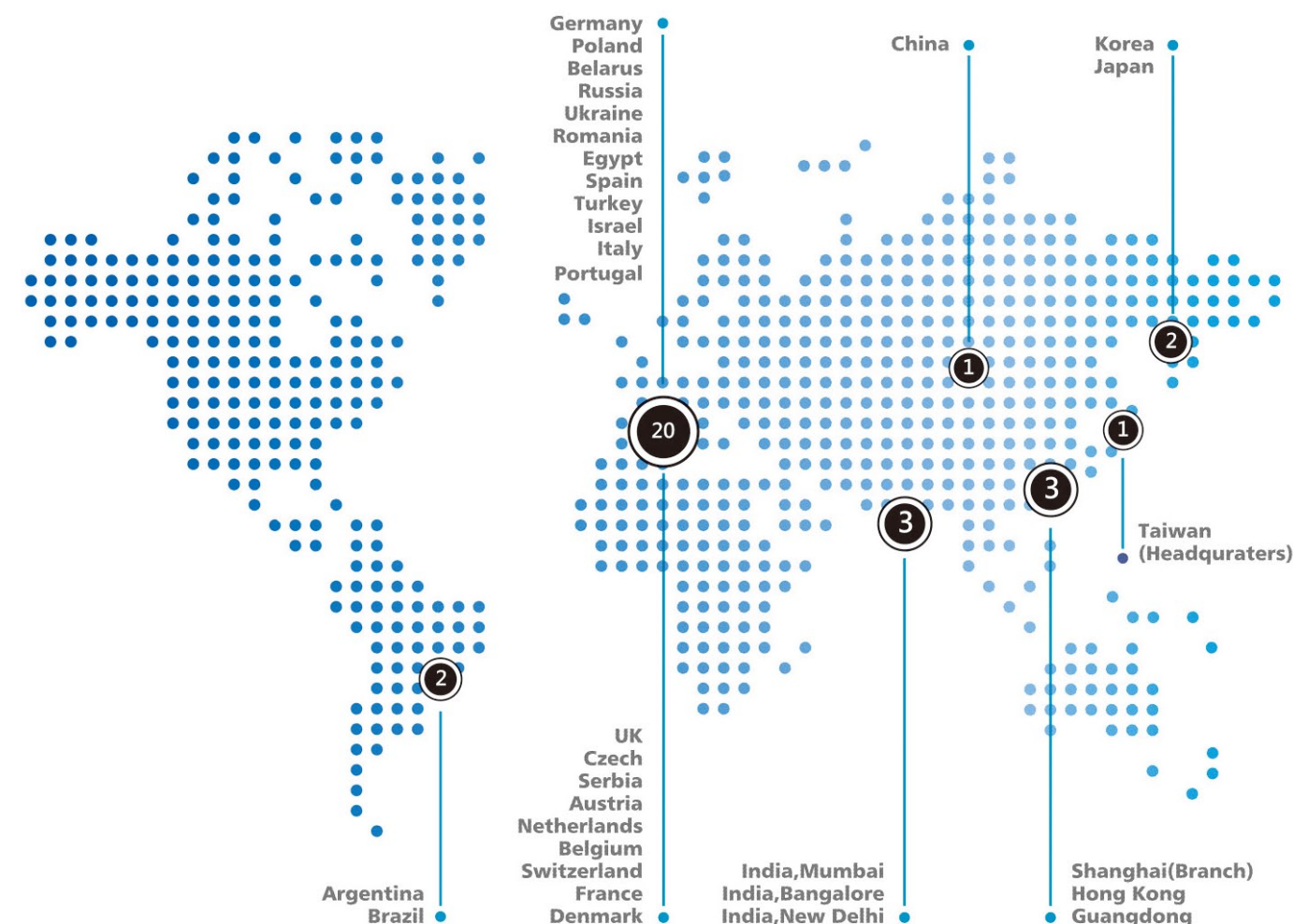
- Announced Automotive Headlamp LED series
- Mass Production of 1W & 2W Phenix 3030
- Achieved 15 copies of SGS certified LM-80 test report. Including LED emitter and COB series.
- Announced 208lm/W white light LED
- Announced chip level package technology,CSP(Chip Scale Package), which can achieve over 250 lm at max. drive current of 1A.
- Announced high power COB to 400W

2013

- Announced Flip Chip technology on 10Watt COB.
- Achieved Energy Star LM-80 certificate by ProLight's TMHAL technology.
- LED Product reached 1000lm/\$1 (USD).

2012

- From capital raising through private equity, Epistar have become ProLight's major shareholder and strategic partner The private equity have released 8 million shares and the company capital raised to NTD\$ 460 million.
- Announced 162lm/W High Voltage LED.
- LED Product reached 600lm/\$1 (USD).
- Moved into new factory in Zhongli industrial park with factory area of 7000 m²



2011

- Company capital added NTD\$ 49 million and the capital raised to NTD\$380 million.
- Established the subsidiary company Shanghai Welight Electronic CO. LTD.
- LED Product reached 400lm/\$1 (USD).

2010

- Developed up to 100W COB series and in mass production.

2009

- Announced 1W & 3W AC LED product

2008

- Announced 50W & 100W LED module (Light source size 2cm x 2cm).
- Announced LED product series for plant growth application.

2007

- Certified by ISO 9001:2000 & 14001:2004 and RoHS Compliant.
- Achieved US patent for High power LED package.

2006

- Launched 5W High Power LED series.

2005

- Achieved high power LED package patent in Taiwan.

2004

- Company Founded in Taiwan.



LM-80 For ENERGY STAR

QUALITY POLICY

Our goal is to ensure our customer receives LED products that are 100% fulfill environmental standard requirements and having the exact product spec. defined in the datasheet.

Through product design, use of material, manufacturing and quality checks to make sure we fulfill our product quality policies.

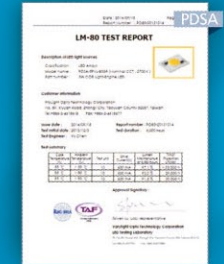
Our ultimate goal is to achieve satisfaction from all of our customers.

LM-80 REPORT

ENERGY STAR



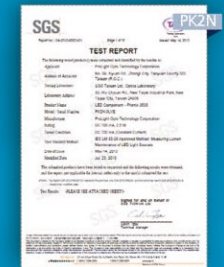
PACE C0B series



PDSA C0B series



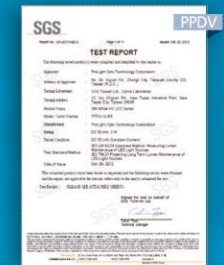
PJ2N PHENIX 3030



PK2N PHENIX 3535



PM2B PROEON Series

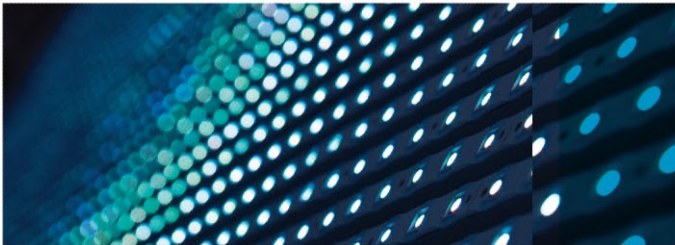


PPDV AC-HV LED Series

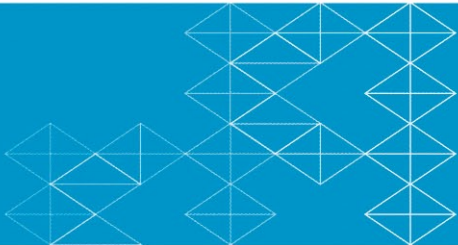


PS2N PHENIX 3020

PROLIGHT LED PROTFOLIO



MANUFACTURER OF LED
PACKAGING FROM TAIWAN
CATALOG. 2015-2016



COB series

					
Series	CE	CF	CG	S	HV S
Part No.	PACE	PACF	PACG	PDSA	PDSB
Footprint (mm)	13.5 x 13.5	19.0 x 19.0	28.0 x 28.0	12.0 x 8.0	15.0 x 12.0
Viewing Angle	120	120	120	120	120
Typical Watt/mA@V	7W / 90mA@36V 14W / 180mA@36V 21W / 270mA@36V 28W / 360mA@36V	57W / 720mA@36V	110W / 1440mA@36V	5W / 500mA@9V 6W / 140mA@38V	4W / 30mA@136V 7W / 38mA@182V
Max. Watt/mA@V	7W / 180mA@39V 14W / 360mA@39V 21W / 540mA@39V 28W / 720mA@39V	57W / 1440mA@39V	110W / 2880mA@39V	5W / 560mA@9V 6W / 160mA@38V	4W / 30mA@136V 7W / 38mA@182V

Emitter series

							
Series	PHENIX 3030	PHENIX 3020	PHENIX 3535	PHENIX 3535 NV	PHENIX 3030D	HORNET	PROEON
Part No.	PJ2N	PS2N	PK2N	PK2N	PJ2N	PC8N	PM2B
Footprint (mm)	3.0 x 3.0	3.0 x 2.0	3.45 x 3.44	3.45 x 3.44	3.0 3.0	7.0 x 9.0	7.26 x 14.2
Viewing Angle	120	120	130	130	130	140	130
Watt/mA@V	1W / 350mA@3.2V 1W / 300mA@3.2V 1W / 150mA@6.4V 2W / 300mA@6.2V 2W / 600mA@3.1V	0.2W / 60mA@3.2V 0.4W / 60mA@6.4V 0.5W / 150mA@3.2V 1W / 300mA@3.4V	1W / 350mA@3.3V 3W / 700mA@3.2V 4W / 1000mA@3.1V 5W / 1200mA@3.05V	3W / 700mA@3.2V	2W / 150mA@6.2V 2W / 300mA@3.1V	4W / 480mA@9.3V 6W / 600mA@9.5V 7W / 280mA@24V	1W / 350mA@3.3V 3W / 700mA@3.6V

RGB in One

				
Series	HORNET	CRAB	BUTTERFLY	PROEON
Part No.	PC8N	PP6N	PF6N	PM6B
Footprint (mm)	7.0 x 9.1	4.0 x 5.0	6.0 x 6.0	7.26 x 14.2
Viewing Angle	140	120	140	130
Watt	5W / 10W	0.2W / 0.5W / 1W	9W	1W / 3W

AC-HV LED

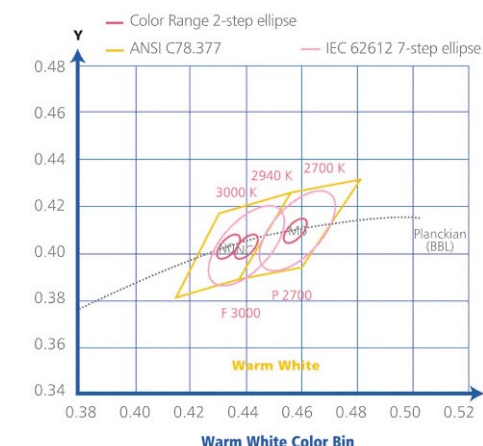
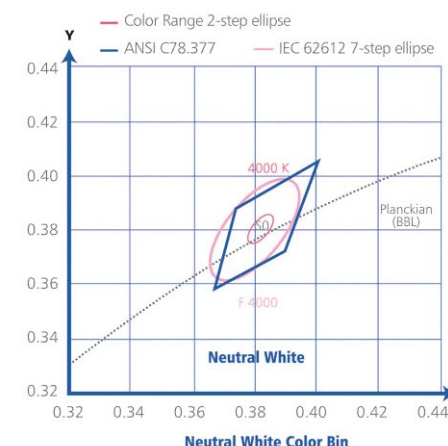
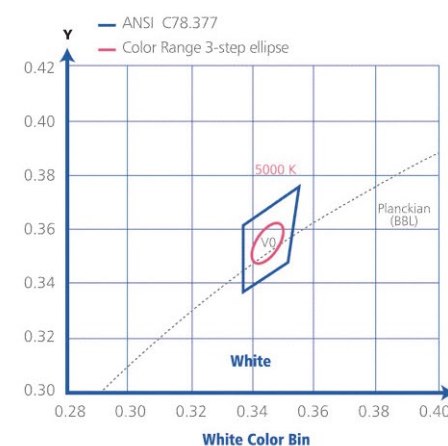
						
Series	AC LED	AC LED	PPDV	PJDV	PKDV	FLASH 2016
Part No.	PEA2	PTA1 / PTA2	PPDV	PJDV	PKDV	FLASH 2016
Footprint (mm)	6.8 x 6.8	7.8 x 7.0	4.0 x 5.0	3.0 x 3.0	3.45 x 3.44	2.04 x 1.64
Viewing Angle	140	140	140	120	130	125
Watt/mA@V	2W / 12mA@210V	3W / 30mA-rms@93V 3W / 10mA-rms@205V	2W / 45mA@50V	2W / 33mA@46V	2W / 33mA@45.6V	3W / 1000mA@3.65V

FLASH

COB LIGHT ENGINE SERIES

Chip On Board light engine series is a compact high flux density light source that delivers efficacy, which ranges from 5W~200W.

COBs are designed for large, open area lighting, including street, wide area, high/low bay, and commercial lighting.



COB SERIES

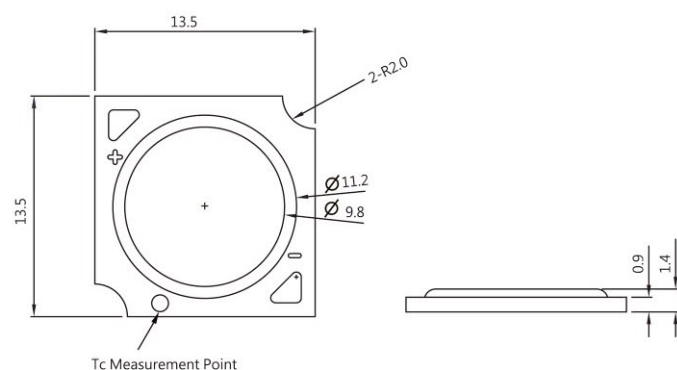
- 09 COB CE
- 11 COB CF
- COB CG
- 13 COB S
- COB HV S



NEW!
COB CE Series
2-Step Guarantee with Neutral / Warm White

Features

- Size : 13.5 x 13.5 mm
- Energy Star binning structure, neutral white and warm white with 2 steps guarantee



Watt	Part No.	Color	CRI Min.	Test Current (mA) Max Current (mA)	V _F (V) Typ.	Lumens Min. Typ.	CCT Typ.	2θ½[°]
7	PACE-7FWL-BC1P	□ White	80	90 180	36.0 39.5	430 480 765 850	5000 K	120
	PACE-7FNL-BC1P	□ Neutral White	80	90 180	36.0 39.5	425 470 750 835	4000 K	120
	PACE-7FVL-BC1P	■ Warm White	80	90 180	36.0 39.5	385 450 685 795	3000 K 2940 K 2700 K	120
	PACE-7FVL-DC1P	■ Warm White	90	90 180	36.0 39.5	325 385 580 675	3000 K 2940 K 2700 K	120
14	PACE-14FWL-BC2P	□ White	80	180 360	36.0 39.5	860 960 1530 1700	5000 K	120
	PACE-14FNL-BC2P	□ Neutral White	80	180 360	36.0 39.5	845 945 1500 1670	4000 K	120
	PACE-14FVL-BC2P	■ Warm White	80	180 360	36.0 39.5	770 900 1370 1590	3000 K 2940 K 2700 K	120
	PACE-14FVL-DC2P	■ Warm White	90	180 360	36.0 39.5	655 765 1170 1350	3000 K 2940 K 2700 K	120
21	PACE-21FWL-BC3P	□ White	80	270 540	36.0 39.5	1300 1440 2300 2560	5000 K	120
	PACE-21FNL-BC3P	□ Neutral White	80	270 540	36.0 39.5	1270 1420 2260 2520	4000 K	120
	PACE-21FVL-BC3P	■ Warm White	80	270 540	36.0 39.5	1160 1350 2060 2400	3000 K 2940 K 2700 K	120
	PACE-21FVL-DC3P	■ Warm White	90	270 540	36.0 39.5	985 1150 1750 2040	3000 K 2940 K 2700 K	120
28	PACE-28FWL-BC4P	□ White	80	360 720	36.0 39.5	1710 1910 3040 3380	5700 K 5000 K	120
	PACE-28FNL-BC4P	□ Neutral White	80	360 720	36.0 39.5	1680 1880 2980 3330	4000K	120
	PACE-28FVL-BC4P	■ Warm White	80	360 720	36.0 39.5	1530 1790 2720 3170	3000 K 2940 K 2700 K	120
	PACE-28FVL-DC4P	■ Warm White	90	360 720	36.0 39.5	1300 1520 2310 2700	3000 K 2940 K 2700 K	120

COB SERIES

NEW!

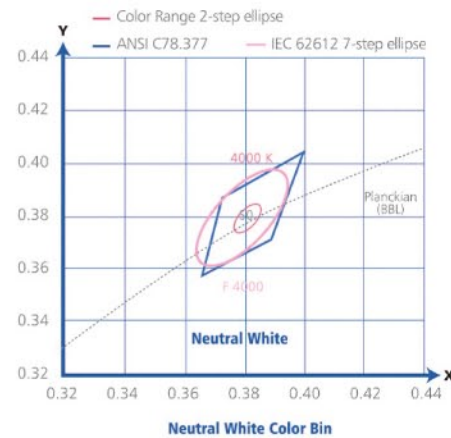
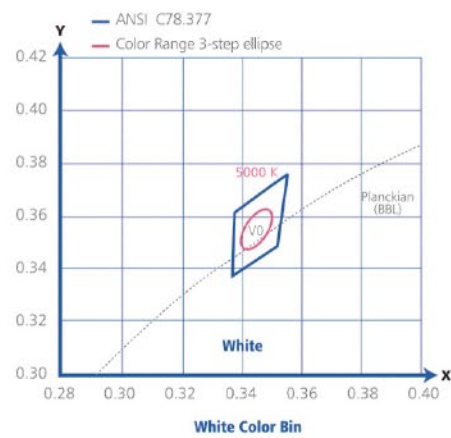
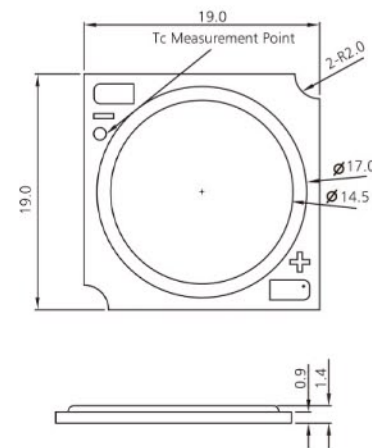
COB CF Series

2-Step Guarantee with Neutral / Warm White



Features

- Size : 19.0 x 19.0 mm
- Energy Star binning structure, neutral white and warm white with 2 steps guarantee.

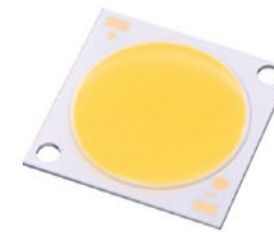


Watt	Part NO.	Color	CRI	Test Current (mA)	V _F (V)	Lumens		CCT	2θ½[°]
			Min.	Max Current (mA)	Typ.	Min.	Typ.	Typ.	
57	PACF-57FWL-BC8P	□ White	80	720	36.0	3420	3810	5000 K	120
				1440	39.5	6070	6750		
	PACF-57FNL-BC8P	□ Neutral White	80	720	36.0	3360	3750	4000 K	120
				1440	39.5	5960	6650		
	PACF-57FVL-BC8P	■ Warm White	80	720	36.0	3070	3570	3000 K 2940 K 2700 K	120
				1440	39.5	5440	6330		
	PACF-57FVL-DC8P	■ Warm White	90	720	36.0	2610	3040	3000 K 2940 K 2700 K	120
				1440	39.5	4620	5380		

NEW!

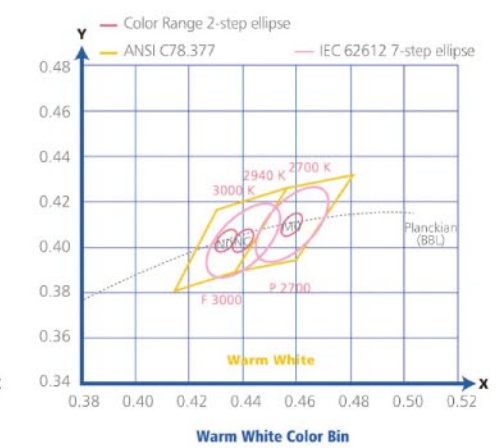
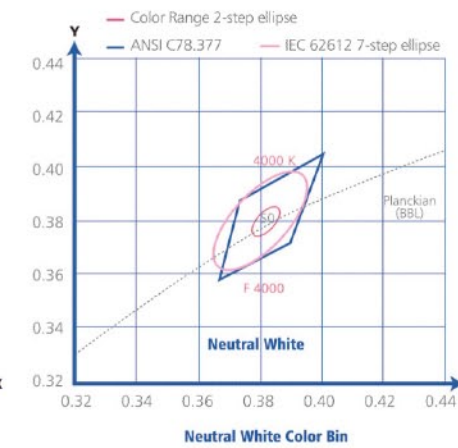
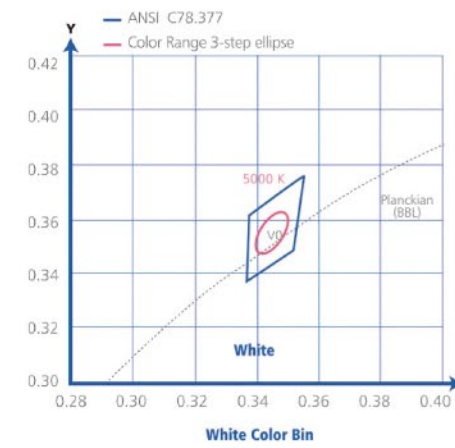
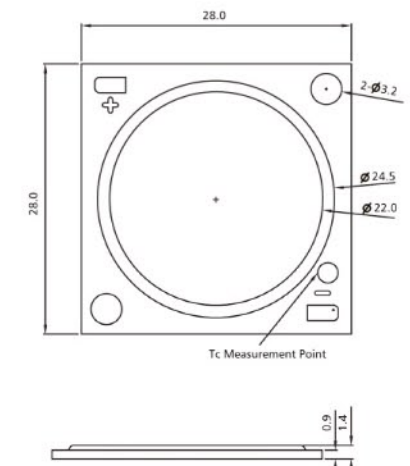
COB CG Series

2-Step Guarantee with Neutral / Warm White



Features

- Size : 28.0 x 28.0 mm
- Energy Star binning structure, neutral white and warm white with 2 steps guarantee.

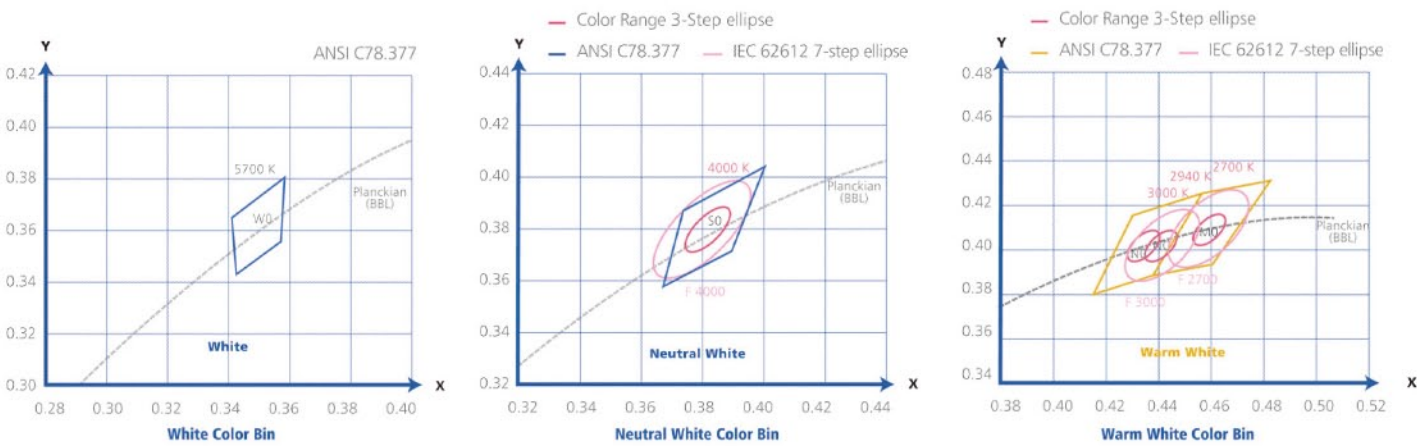
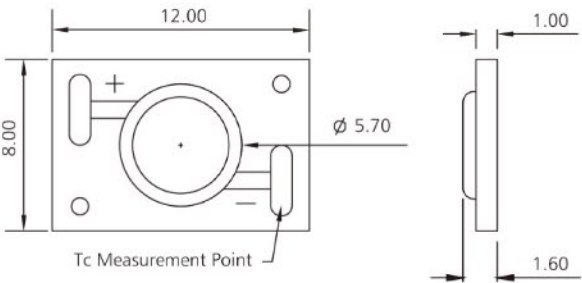


Watt	Part NO.	Color	CRI	Test Current (mA)	V _F (V)	Lumens		CCT	2θ½[°]
			Min.	Max Current (mA)	Typ.	Min.	Typ.	Typ.	
110	PACG-110FWL-BCGP	□ White	80	1440	36.0	6850	7620	5000 K	120
				2880	39.5	12140	13510		
	PACG-110FNL-BCGP	□ Neutral White	80	1440	36.0	6730	7500	4000 K	120
				2880	39.5	11930	13300		
	PACG-110FVL-BCGP	■ Warm White	80	1440	36.0	6130	7150	3000 K 2940 K 2700 K	120
				2880	39.5	10870	12670		
	PACG-110FVL-DCGP	■ Warm White	90	1440	36.0	5210	6080	3000 K 2940 K 2700 K	120
				2880	39.5	9240	10770		

COB S SERIES



- Features**
- Size : 12.0 x 8.0 mm
 - 100% dimension compatible with Sharp Petite Zenigate.
 - 3-Step MacAdam Ellipse for neutral white and warm white.
-



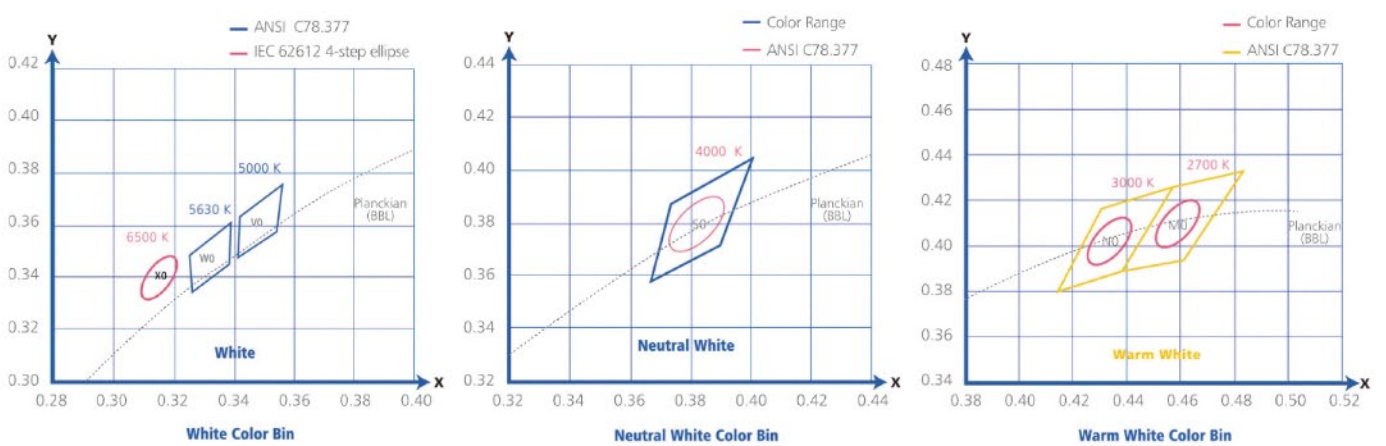
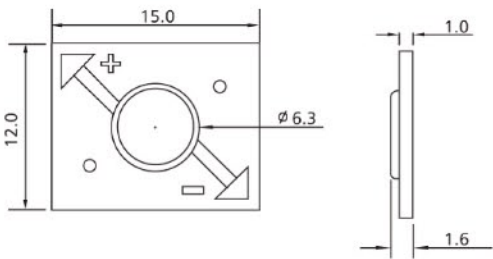
Watt	Part NO.	Color	CRI	Test Current (mA)	V _F (V)	Lumens		CCT	2θ½[°]
			Min.	Max Current (mA)		Min.	Typ.		
5	PDSA-5FWL-N35N	□ White	70	500	9.0	590	665	5700 K	120
				560		655	735		
	PDSA-5FNL-B35P	□ Neutral White	80	500	9.0	520	580	4000 K	120
				560		575	640		
	PDSA-5FVL-B35P	■ Warm White	80	500	9.0	475	555	3000 K 2940 K 2700 K	120
				560		525	610		
	PDSA-5FVL-D35P	■ Warm White	93	500	9.0	390	455	3000 K 2940 K 2700 K	120
				560		430	500		
6	PDSA-6FWL-NC1N	□ White	70	140	38.0	600	670	5700 K	120
				160		665	740		
	PDSA-6FNL-BC1P	□ Neutral White	80	140	38.0	525	585	4000 K	120
				160		580	650		
	PDSA-6FVL-BC1P	■ Warm White	80	140	38.0	480	560	3000 K 2940 K 2700 K	120
				160		530	620		
	PDSA-6FVL-DC1P	■ Warm White	93	140	38.0	395	460	3000 K 2940 K 2700 K	120
				160		440	510		

NEW!

COB HV S SERIES



- Features**
- Size : 15.0 x 12.0 mm
 - Energy Star binning structure, neutral white and warm white with 4 steps guarantee.
-



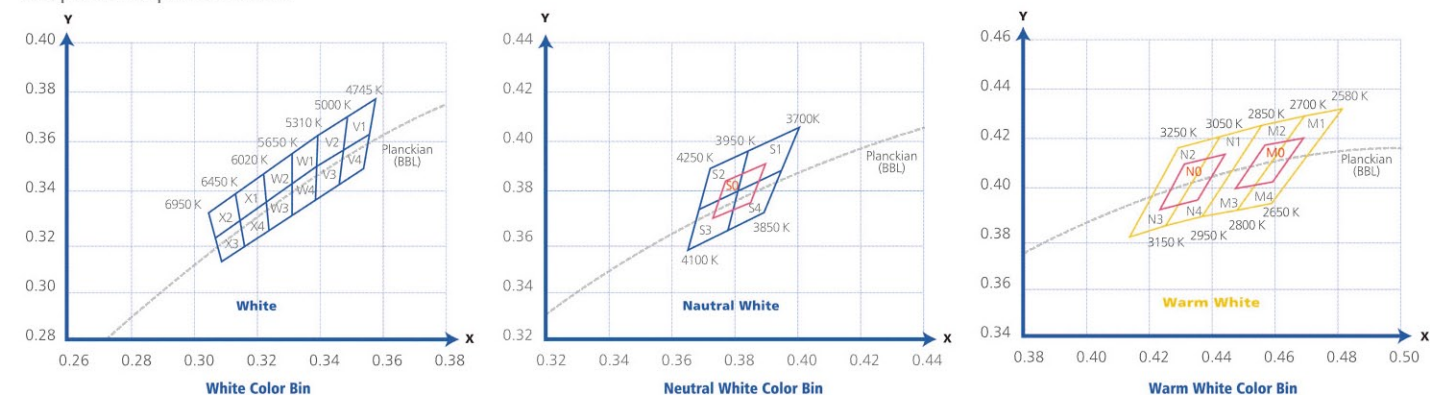
Watt	Part NO.	Color	CRI	Test Current (mA)	V _F (V)	Lumens		CCT	2θ½[°]
			Min.	Max Current (mA)	Typ.	Min.	Typ.	Typ.	
4	PDSB-4FWL-B91N	□ White	80	30	136	465	495	6500 K 5000 K	120
	PDSB-4FNL-B91N	□ Neutral White	80	30	136	465	495	4000 K	120
	PDSB-4FVL-B91N	■ Warm White	80	30	136	455	485	3000 K	120
7	PDSB-7FWL-BCOP	□ White	80	38	182	720	800	6500 K 5630 K 5000 K	12
				40		740	820		
	PDSB-7FNL-BCOP	□ Neutral White	80	38	182	710	780	4000 K	12
				40		730	800		
	PDSB-7FVL-BCOP	■ Warm White	80	38	182	700	760	3000 K 2700 K	12
				40		720	780		

MID POWER

ProLight ProLight's mid power LED package has one of the smaller package size with high efficacy, high CRI, low power consumption and wide viewing angle.



White Binning Structure Graphical Representation



Watt	Part NO.	Color	CRI Min.	Test Current (mA)	V _F (V) Typ.	Bin Code	CCT		2θ _{1/2} [°]
							Min.	Max.	
	PJ2N-1FWE-2SC	□ White	70	150	6.4	V1/V2/W1*/W2*	4745 K	6950 K	120
	PJ2E-1FWE-2SC	□ White	70	150	6.6	U2/V1/V2*/W1*	4745 K	6950 K	120
	PJ2N-1FNE-2SC	□ Neutral White	70	150	6.4	V1/V2/W1*	3700 K	4250 K	120
	PJ2E-1FNE-2SC	□ Neutral White	70	150	6.6	U2/V1/V2*/W1*	3700 K	4250 K	120
	PJ2N-1FWE-N2SCR8	□ White	80	150	6.4	U2/V1/V2*/W1*	4745 K	6950 K	120
	PJ2E-1FWE-N2SCR8	□ White	80	150	6.6	U1/U2/V1*/V2*	4745 K	6950 K	120
	PJ2N-1FNE-N2SCR8	□ Neutral White	80	150	6.4	U2/V1/V2*/W1*	3700 K	4250 K	120
	PJ2E-1FNE-N2SCR8	□ Neutral White	80	150	6.6	U1/U2/V1*/V2*	3700 K	4250 K	120
	PJ2N-1FVE-N2SCR8	■ Warm White	80	150	6.4	U1/U2/V1/V2*	2580 K	3250 K	120
	PJ2E-1FVE-N2SCR8	■ Warm White	80	150	6.6	T2/U1/U2/V1*	2580 K	3250 K	120
	PJ2N-1FWE-2	□ White	70	300	3.2	V1/V2/W1*/W2*	4745 K	6950 K	120
	PJ2E-1FWE-2	□ White	70	300	3.3	U2/V1/V2*/W1*	4745 K	6950 K	120
	PJ2N-1FNE-2	□ Neutral White	70	300	3.2	V1/V2/W1*	3700 K	4250 K	120
	PJ2E-1FNE-2	□ Neutral White	70	300	3.3	U2/V1/V2*/W1*	3700 K	4250 K	120
	PJ2N-1FWE-N2R8	□ White	80	300	3.2	U2/V1/V2*/W1*	4745 K	6950 K	120
	PJ2E-1FWE-N2R8	□ White	80	300	3.3	U1/U2/V1*/V2*	4745 K	6950 K	120
	PJ2N-1FNE-N2R8	□ Neutral White	80	300	3.2	U2/V1/V2*/W1*	3700 K	4250 K	120
	PJ2E-1FNE-N2R8	□ Neutral White	80	300	3.3	U1/U2/V1*/V2*	3700 K	4250 K	120
	PJ2N-1FVE-N2R8	■ Warm White	80	300	3.2	U1/U2/V1/V2*	2580 K	3250 K	120
	PJ2E-1FVE-N2R8	■ Warm White	80	300	3.3	T2/U1/U2/V1*	2580 K	3250 K	120
	PJ2N-1FWE-JB	□ White	70	350	3.2	V1/V2*/W1*/W2*	5000 K	7000 K	120
	PJ2N-1FNE-JB	□ Neutral White	70	350	3.2	V1/V2*/W1*/W2*	3500 K	4500 K	120

*ask for stock

PHENIX 3030 SERIES

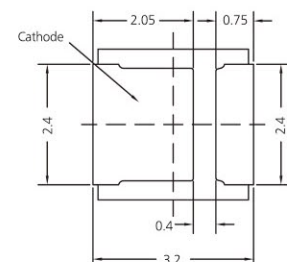
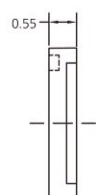
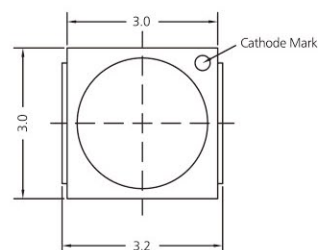
Features

- High flux per LED
- Good color uniformity
- Best thermal material solution in industry
- Best Moisture Sensitivity: JEDEC Level 1
- Superior ESD protection



Photometric Luminous Flux Bin (lm)

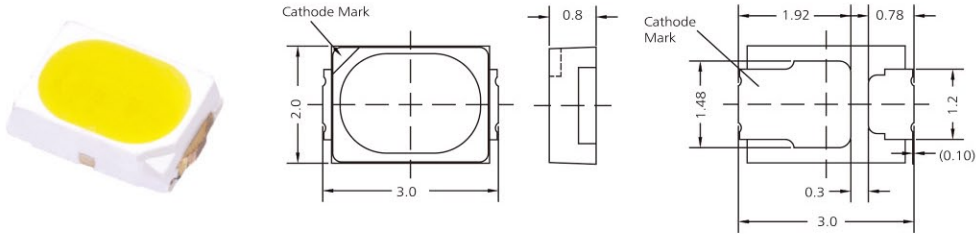
BIN	MIN	MAX
T1	70	80
T2	80	90
U1	90	100
U2	100	110
V1	110	120
V2	120	130
W1	130	140
W2	140	155
X1	155	170





PHENIX 3020 SERIES

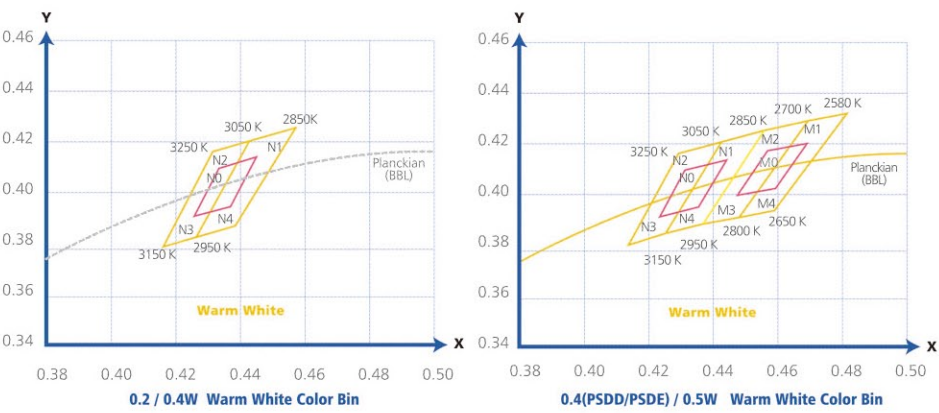
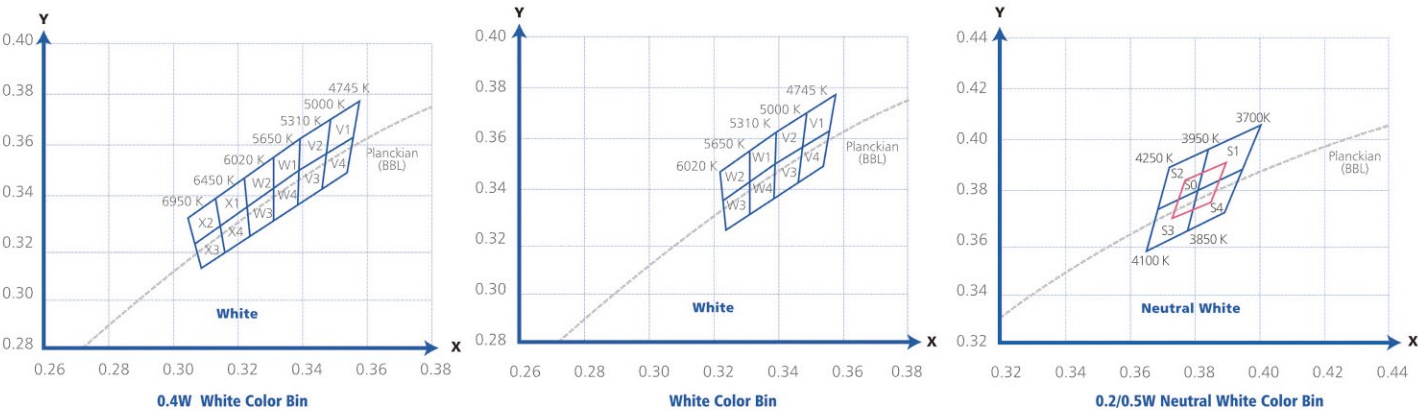
- Features
- High flux per LED
 - Good color uniformity
 - Best thermal material solution in industry
 - Best Moisture Sensitivity: JEDEC Level 1
 - Superior ESD protection



Watt	Part NO.	Color	CRI	Test Current (mA)	V _F (V) Typ.	Bin Code	CCT		2θ½[°]
			Min.				Min.	Max.	
0.2	PS2P-TFWE	White	70	60	3.1	N5/P1/P2/P3/P4*/P5*/Q1*	4745 K	6950 K	120
	PS2P-TFNE	Neutral White	70	60	3.1	N5/P1/P2/P3/P4*/P5*/Q1*	3700 K	4250 K	120
	PS2P-TFVE	Warm White	70	60	3.1	N4/N5/P1/P2/P3*/P4*/P5*	2850 K	3250 K	120
	PS2P-TFWE-R8	White	80	60	3.1	N4/N5/P1/P2/P3*/P4*/P5*	4745 K	6950 K	120
	PS2P-TFNE-R8	Neutral White	80	60	3.1	N4/N5/P1/P2/P3*/P4*/P5*	3700 K	4250 K	120
	PS2P-TFVE-R8	Warm White	80	60	3.1	N3/N4/N5/P1/P2*/P3*/P4*	2850 K	3250 K	120
0.4	PS2N-FFWE-2SCR8	White	80	60	6.4	R1/R2/S1*/S2*	4745 K	6020 K	120
	PS2N-FFNE-2SCR8	Neutral White	80	60	6.4	R1/R2/S1*/S2*	3700 K	4250 K	120
	PS2N-FFVE-2SCR8	Warm White	80	60	6.4	Q2/R1/R2/S1*	2850 K	3250 K	120
	PSDC-FFWE-NR8	White	80	26	15.0	S1/S2/S3*/S4*	4745 K	6020 K	120
	PSDC-FFNE-NR8	Neutral White	80	26	15.0	R2/S1/S2*/S3*	3700 K	4250 K	120
	PSDC-FFVE-NR8	Warm White	80	26	15.0	R2/S1/S2*/S3*	2580K	3250 K	120
	PSDE-FFWE-R8	White	80	17	23.5	R2/S1/S2*/S3*	4745 K	6020 K	120
	PSDE-FFNE-R8	Neutral White	80	17	23.5	R2/S1/S2*/S3*	3700 K	4250 K	120
	PSDE-FFVE-R8	Warm White	80	17	23.5	R1/R2/S1*/S2*	2580 K	3250 K	120

*ask for stock

White Binning Stcuture
Graphical Representation



Photometric Luminous Flux Bin (lm) 0.2W

Bin	Min	Max
N3	19.0	20.0
N4	20.0	21.0
N5	21.0	22.5
P1	22.5	24.0
P2	24.0	25.5
P3	25.5	27.0
P4	27.0	28.5
P5	28.5	30.0

0.4/0.5W

Bin	Min	Max
Q2	35.0	40.0
R1	40.0	45.0
R2	45.0	50.0
S1	50.0	55.0
S2	55.0	60.0
S3	60.0	65.0
S4	65.0	70.0
T1	70.0	80.0

Watt	Part NO.	Color	CRI Min.	Test Current (mA)	V _F (V) Typ.	Bin Code	CCT		2θ½[°]
							Min.	Max.	
0.5	PS2N-FFWE	White	70	150	3.2	S2/S3/S4/T1*	4745 K	6950 K	120
	PS2N-FFNE	Neutral White	70	150	3.2	S2/S3/S4/T1*	3700 K	4250 K	120
	PS2N-FFVE	Warm White	70	150	3.2	S1/S2/S3/S4*	2580 K	3250 K	120
	PS2N-FFWE-R8	White	80	150	3.2	S1/S2/S3/S4*	4745 K	6950 K	120
	PS2N-FFNE-R8	Neutral White	80	150	3.2	S1/S2/S3*/S4*	3700 K	4250 K	120
	PS2N-FFVE-R8	Warm White	80	150	3.2	R2/S1/S2/S3*	2580 K	3250 K	120
	PS2N-FFWE-R9	White	90	150	3.2	R2/S1/S2*/S3*	4745 K	6020 K	120
	PS2N-FFNE-R9	Neutral White	90	150	3.2	R2/S1/S2*/S3*	3700 K	4250 K	120
	PS2N-FFVE-R9	Warm White	90	150	3.2	R1/R2/S1*/S2*	2580 K	3250 K	120
	PS2E-1FWE	White	70	300	3.4	U2/V1/V2*/W1*	4745 K	6950 K	120
1	PS2E-1FNE	Neutral White	70	300	3.4	U2/V1/V2*	3700 K	4250 K	120
	PS2E-1FWE-R8	White	80	300	3.4	U1/U2/V1*	4745 K	6950 K	120
	PS2E-1FNE-R8	Neutral White	80	300	3.4	U1/U2/V1*	3700 K	4250 K	120
	PS2E-1FVE-R8	Warm White	80	300	3.4	T2/U1/U2*	2580 K	3250 K	120

*ask for stock

HIGH POWER

ProLight high power LED package delivers the efficacy, color quality and various compact forms.

All products are RoHS compliance, ProLight's high power LED packages are eco-friendly and suitable for all lighting applications.

HIGH POWER

- 19 PHENIX 3535
- 21 PHENIX 3535 NV
- 22 HORNET 7090
- 23 PHENIX 3030D
- 25 PROEON

PHENIX 3535 SERIES

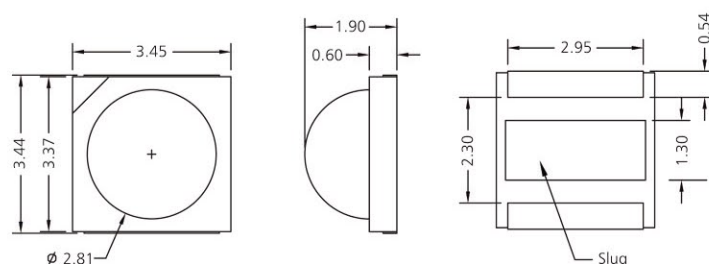
Features

- High flux per LED
- Various colors
- Good color uniformity
- Best thermal material solution
- Best Moisture Sensitivity: JEDEC Level 1
- Superior ESD protection
- 100% foot print compatible with Cree XP-C / XP-E / XP-G



Photometric Luminous Flux Bin I (lm)

Bin	Min	Max
T1	70	80
T2	80	90
U1	90	100
U2	100	110
V1	110	120
V2	120	130
W1	130	140
W2	140	155
X1	155	170



Watt	Part NO.	Color	CRI Min.	Test Current (mA)	V _F (V) Typ.	Bin Code	CCT		2θ _{1/2} [°]	Max Current(mA)
							Min.	Max.		
1	PK2N-1LWE	White	70	350	3.3	V1/V2/W1/W2/X1*	4100 K	10000 K	130	-
	PK2N-1LVE-R7	Warm White	70	350	3.3	U2/V1/V2/W1/W2*/X1*	2700 K	4100 K	130	-
	PK2N-1LWE-R8	White	80	350	3.3	U2/V1/V2/W1/W2*/X1*	4100 K	10000 K	130	-
	PK2N-1LVE-R8	Warm White	80	350	3.3	U1/U2/V1/V2/W1*/W2*	2700 K	4100 K	130	-
3	PK2E-3LWE-BR7	White	70	350	3.2	V1*/V2/W1/W2*/X1*	5000 K	7000 K	130	700
	PK2N-3LWE-BSD	White	70	350	3.1	V2*/W1/W2/X1*	5000 K	10000 K	130	700
	PK2N-3LWE-BVSD	White	70	350	3.1	V1*/V2/W1/W2/X1*	5000 K	10000 K	130	700
	PK2E-3LWE-BR8	White	80	350	3.2	U2/V1/V2*/W1*	5000 K	7000 K	130	700
	PK2N-3LWE-BR8	White	80	350	3.1	V1/V2/W1/W2*/X1*	5000 K	10000 K	130	700
	PK2N-3LWE-BVR8	White	80	350	3.1	U2*/V1/V2/W1/W2*/X1*	5000 K	10000 K	130	700
	PK2E-3LNE-R7	Neutral White	70	350	3.2	V1*/V2/W1/W2*/X1*	3800 K	5000 K	130	700
	PK2E-3LNE-R8	Neutral White	80	350	3.2	U1*/U2/V1/V2*/W1*	3800 K	5000 K	130	700
	PK2N-3LNE-R8	Neutral White	80	350	3.1	V1/V2/W1*/W2*	3500 K	5000 K	130	700
	PK2N-3LNE-BVR8	Neutral White	80	350	3.1	U2*/V1/V2/W1/W2*/X1*	3500 K	5000 K	130	700
	PK2N-3LVE-R7	Warm White	70	350	3.1	V1/V2/W1/W2*/X1*	2700 K	4100 K	130	700
	PK2E-3LVE-R8	Warm White	80	350	3.2	U1/U2/V1/V2*	2700 K	3250 K	130	700
	PK2N-3LVE-R8	Warm White	80	350	3.1	U2/V1/V2/W1*/W2*	2700 K	4100 K	130	700
	PK2N-3LVE-BVR8	Warm White	80	350	3.1	U1*/U2/V1/V2/W1*/W2*	2700 K	3500 K	130	700
	PK2N-3LVE-R95	Warm White	93	350	3.1	T2/U1/U2*/V1*/V2*	2700 K	4100 K	130	700
4	PK2N-4LWE-BVR7	White	70	350	3.1	W1/W2/X1*	5000 K	7000 K	130	1000
	PK2N-4LNE-BVR8	Neutral White	80	350	3.1	V2/W1/W2*/X1*	3800 K	5000 K	130	1000
	PK2N-4LVE-BVR8	Warm White	80	350	3.1	V1/V2/W1*/W2*	2700 K	3250 K	130	1000
5	PK2E-5LWE-BR7	White	70	350	3.05	W1/W2/X1*	5000 K	7000 K	130	1200
	PK2E-5LWE-BR8	White	80	350	3.05	V2/W1/W2*/X1*	5000 K	7000 K	130	1200
	PK2E-5LNE-R7	Neutral White	70	350	3.05	W1/W2/X1*	3800 K	5000 K	130	1200
	PK2E-5LNE-R8	Neutral White	80	350	3.05	V2/W1/W2*/X1*	3800 K	5000 K	130	1200
	PK2E-5LVE-R8	Warm White	80	350	3.05	V1/V2/W1*/W2*	2700 K	3250 K	130	1200

*ask for stock



HIGH POWER

Mono Color

Mono Color Bin Code, please refer to P42 Flux Bin

Watt	Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Bin Code (lm)	λ _D		2θ½[°]	Max Current(mA)
						Min.	Max.		
1	PK2N-1LRE	Red	350	2.2	S1/S2/T1*	613.5 nm	631 nm	130	350
	PK2N-1LAE	Amber	350	2.2	S1/S2/T1/T2*/U1*	587 nm	597 nm	130	350
	PK2N-1LGE	Green	350	3.4	T2/U1/U2*	515 nm	535 nm	130	350
	PK2N-1LBE	Blue	350	3.3	N*/P/Q*	455 nm	475 nm	130	350
3	PK2N-3LRE-SD	Red	350	2.2	S1/S2/T1*	613.5 nm	631 nm	130	700
	PK2N-3LAE-SD	Amber	350	2.2	S1/S2/T1/T2*/U1*	587 nm	597 nm	130	700
	PK2N-3LGE-SD	Green	350	3.3	T2*/U1/U2/V1/V2/W1*	515 nm	535 nm	130	700
	PK2N-3LCE-SD	Cyan	350	3.3	T1/T2/U1*/U2*	495 nm	515 nm	130	700
4	PK2N-3LBE-SD	Blue	350	3.1	P/Q*	455 nm	475 nm	130	700
	PK2N-4LRE-SD	Red	350	2.15	S1/S2/T1*	620 nm	630 nm	130	1000
NEW!	PK2N-4LGE-SD	Green	350	3.15	V1/V2/W1/W2*	520 nm	535 nm	130	1000

UV/IR Bin Code, please refer to P21 Power Bin

Watt	Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Bin Code (mW)	λ _P		2θ½[°]	Max Current(mA)
						Min.	Max.		
1	PK2N-1LLE-VS	UV-S	350	3.5	N/P/Q*	365 nm	370 nm	130	350
	PK2N-1LLE	UV	350	3.4	Q/R/S*	390 nm	410 nm	130	350
2	PK2N-2LJE-SD	IR850	350	1.6	M/N/P*	840 nm	870 nm	130	1000
	PK2N-3LLE-VS	UV-S	500	3.6	R1/R2/S1*/S2*	365nm	370nm	130	700
3	PK2N-3LLE-VM	UV-M	500	3.5	T2/U1/U2*/V1*	380nm	390nm	130	700
	PK2N-3LLE-V	UV	500	3.4	U1/U2/V1*/V2*	390nm	400nm	130	700
	PK2N-3LLE-SD	UV	350	3.2	Q/R/S*	390 nm	410 nm	130	700
	PK2N-3LLE-L	UV-L	350	3.2	Q/R/S*	415 nm	435 nm	130	700
	PK2N-3LDE-SD	Royal Blue	350	3.1	R/S*	450 nm	460 nm	130	700
	PK2N-3LEE-SD	Cherry Red	350	2.0	M/N/P*	720 nm	740 nm	130	700
4	PK2N-3LME-SD	Crimson	350	2.2	N/P/Q*	650 nm	670 nm	130	700
	PK2N-4LDE-SD	Royal Blue	350	3.1	R/S*	450 nm	460 nm	130	1000

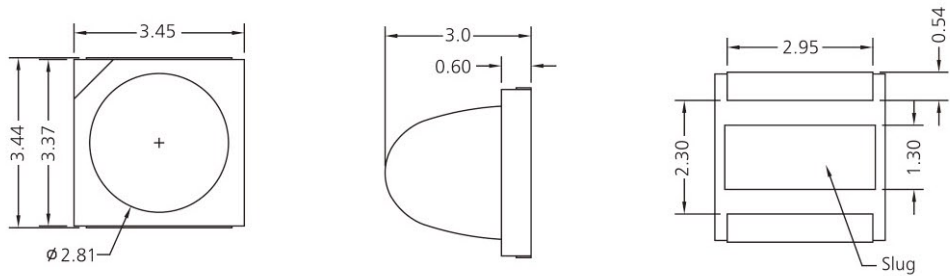
*ask for stock

PHENIX 3535 NV



Features

- Best thermal material solution
- Best Moisture Sensitivity: JEDEC Level 1



Bin @ 350&700mA
Radiometric Power Bin (mW)

Bin	Min	Max
M	225	275
N	275	335
P	335	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

Bin @ 500mA
Radiometric Power Bin (mW)

Bin	Min	Max
R1	455	505
R2	505	560
S1	560	620
S2	620	685
T1	685	755
T2	755	830
U1	830	910
U2	910	1000
V1	1000	1100
V2	1100	1210

Watt	Part NO.	Color	CRI Typ.	Test Current (mA)	V _F (V) Typ.	Bin Code	CCT		2θ½[°]	Max Current(mA)
							Min.	Max.		
3	PK2N-3DWE-BVSD	White	70	350	3.1	U2/V1/V2/W1*/W2*	5000 K	10000 K	55	700
	PK2N-3DNE-BVR7	Neutral White	70	350	3.1	U2/V1/V2/W1*/W2*	3500 K	5000 K	55	700
	PK2N-3DVE-BVR8	Warm White	80	350	3.1	T2/U1/U2/V1*/V2*	2700 K	3500 K	55	700

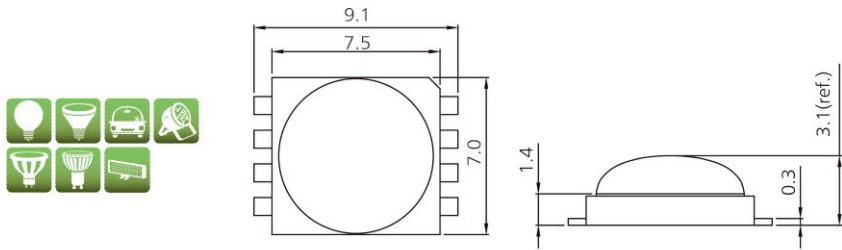
Mono Color

Watt	Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Bin Code	λ _P		2θ½[°]	Max Current(mA)
						Min.	Max.		
1	PK2N-1DLE	UV	350	3.4	Q/R*/S*	390 nm	410 nm	60	-
2	PK2N-2DJE-SD	IR850	350	1.6	M/N*	840 nm	870 nm	45	1000

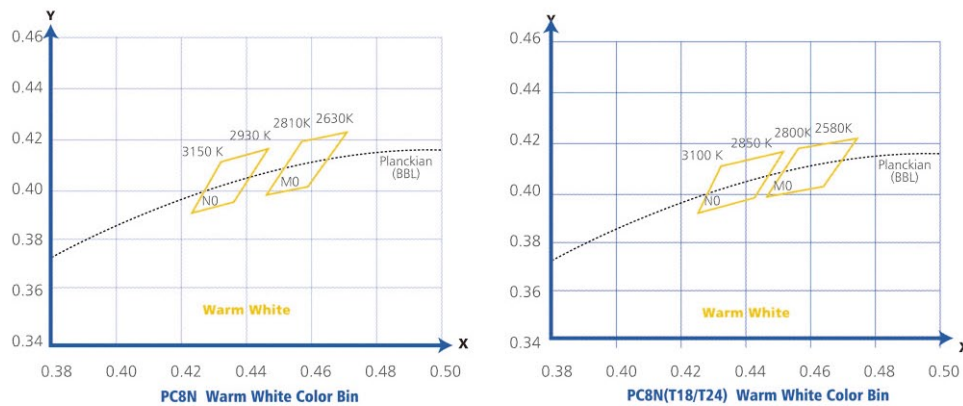
*ask for stock

HORNET 7090 SERIES

- Features
- High flux per LED
 - Good color uniformity
 - Best thermal material solution
 - Best Moisture Sensitivity: JEDEC Level 1
 - Superior ESD protection



White Binning Structure
Graphical Representation



Watt	Part NO.	Color	CRI Min.	Test Current(mA)	V _F (V) Typ.	Lumens Min. Typ.	CCT Min. Max.	2θ½[°]
4	PC8N-4LWE-24	White	70	480	9.3	570 640	4745 K 7050 K	140
	PC8N-4LNE-24R8	Neutral White	80	480	9.3	485 550	3710 K 4745 K	140
	PC8N-4LVE-24R8	Warm White	80	480	9.3	450 520	2630 K 3150 K	140
6	PC8N-6LWE-T18	White	70	600	9.5	730 820	4745 K 6020 K	140
	PC8N-6LNE-T18R7	Neutral White	70	600	9.5	700 780	3710 K 4260 K	140
	PC8N-6LVE-T18R7	Warm White	70	600	9.5	650 740	2580 K 3100 K	140
	PC8N-6LWE-B24R8	White	80	600	9.2	660 740	4745 K 6020 K	140
	PC8N-6LNE-B24R8	Neutral White	80	600	9.2	650 720	3710 K 4260 K	140
	PC8N-6LVE-B24R8	Warm White	80	600	9.2	600 690	2630 K 3150 K	140
7	PC8N-7LWE-T24	White	70	280	24.0	870 980	4745 K 6020 K	140
	PC8N-7LWE-T24R8	White	80	280	24.0	880 890	4745 K 6020 K	140
	PC8N-7LNE-T24R8	Neutral White	80	280	24.0	780 860	3710 K 4260 K	140
	PC8N-7LVE-T24R8	Warm White	80	280	24.0	720 830	2580 K 3100 K	140
10	PC8N-10LWE-C	White	70	350	3.1	115 135	6020 K 7050 K	140
		White	70	350	3.1	115 135	6020 K 7050 K	140
		White	70	350	3.1	115 135	6020 K 7050 K	140
		White	70	350	3.1	115 135	6020 K 7050 K	140

*ask for stock



NEW!

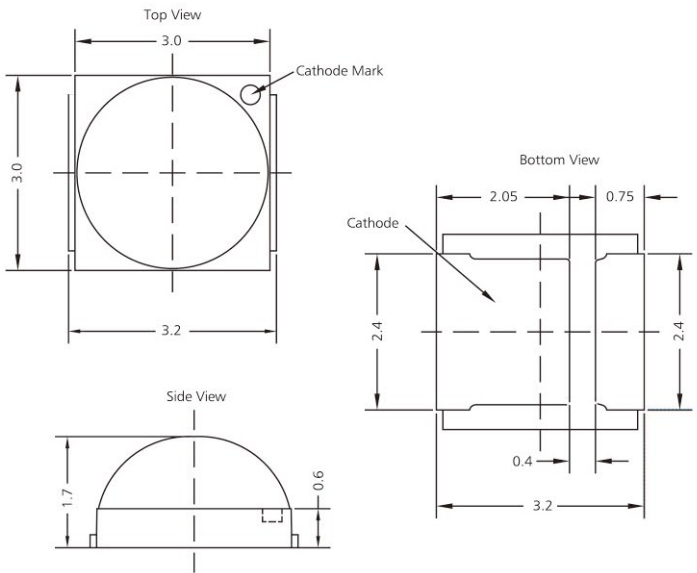
PHENIX 3030D SERIES

- Features
- SMD ceramic package with silicone lens
 - LM-80 certificate! Good Reliability
 - Moisture sensitivity level-MSL-1
 - High Color rendering index
 - Good color uniformity
 - Lead free reflow soldering
 - RoHS compliant



Photometric Luminous Flux Bin (lm)

BIN	MIN	MAX
U1	100	110
V1	110	120
V1	120	130
W1	130	140
W2	140	155
X1	155	170

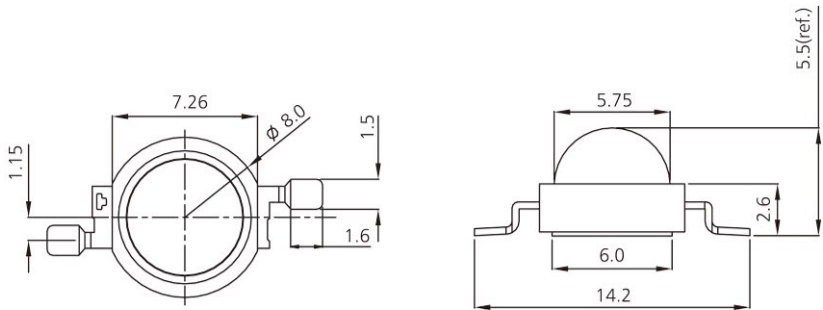


Watt	Part NO.	Color	CRI Min.	Test Current (mA)	V _F (V) Typ.	Bin Code	CCT Min. Max.	2θ½[°]	Max Current
2	PJ2E-2LWE-2SC	White	70	150	6.2	V2/W1/W2/X1*	4745 K 6950 K	130	300
	PJ2E-2LWE-N2SCR8	White	80	150	6.2	V1/V2/W1/W2*	4745 K 6950 K	130	300
	PJ2E-2LNE-2SC	Neutral White	70	150	6.2	V2/W1/W2/X1*	3700 K 4250 K	130	300
	PJ2E-2LNE-N2SCR8	Neutral White	80	150	6.2	V1/V2/W1/W2*	3700 K 4250 K	130	300
	PJ2E-2LVE-N2SCR8	Warm White	80	150	6.2	U2/V1/V2/W1*	2580 K 3250 K	130	300
	PJ2E-2LWE-2	White	70	300	3.1	V2/W1/W2/X1*	4745 K 6950 K	130	600
	PJ2E-2LWE-N2R8	White	80	300	3.1	V1/V2/W1*/W2*	4745 K 6950 K	130	600
	PJ2E-2LNE-2	Neutral White	70	300	3.1	V2/W1/W2/X1*	3700 K 4250 K	130	600
	PJ2E-2LNE-N2R8	Neutral White	80	300	3.1	V1/V2/W1/W2*	3700 K 4250 K	130	600
	PJ2E-2LVE-N2R8	Warm White	80	300	3.1	U2/V1/V2/W1*	2580 K 3250 K	130	600

*ask for stock

PROEON

- Features
- High flux per LED
 - Various colors
 - Good color uniformity
 - Best thermal material solution
 - Best Moisture Sensitivity :JEDEC Level 1
 - Superior ESD protection



Radiometric Power Bin (mW)		
Bin	Min	Max
M	225	275
N	275	335
P	335	435
Q	435	515
R	515	635
S	635	755

Photometric Luminous Flux Bin (lm)
[for White & Warm White]

Bin	Min	Max
T1	67.2	76.6
T2	76.6	87.4
U1	87.4	100
U2	100	110
V1	110	120
V2	120	130
W1	130	140
W2	140	155
X1	155	170

Watt	Part NO.	Color	CRI Typ.	Test Current (mA)	V _F (V) Typ.	Bin Code	CCT		2θ½[°]
							Min.	Max.	
1	PM2B-1LWE	White	74	350	3.3	V1*/V2/W1/W2/X1	4100 K	10000 K	130
	PM2B-1LWE-R8	White	84	350	3.3	U2/V1/V2/W1/W2*/X1*	4100 K	10000 K	130
	PM2B-1LVE	Warm White	-	350	3.3	V1/V2/W1/W2/X1	2700 K	4100 K	130
	PM2B-1LVE-R7	Warm White	77	350	3.3	U2/V1/V2/W1*/W2*	2700 K	4100 K	130
	PM2B-1LVE-R8	Warm White	80	350	3.3	U1*/U2/V1/V2/W1*/W2*	2700 K	4100 K	130
3	PM2B-3LWE-SD	White	74	700	3.5	X2/Y1/Y2*	4100 K	10000 K	130
	PM2B-3LWE-R8	White	84	700	3.5	X1/X2/Y1*	4100 K	10000 K	130
	PM2B-3LVE-R7	Warm White	77	700	3.5	X1/X2/Y1*	2700 K	4100 K	130
	PM2B-3LVE-R8	Warm White	80	700	3.5	X1/X2/Y1*	2700 K	4100 K	130
	PM2B-3LVE-R95	Warm White	95	700	3.5	W1/W2/X1*	2700 K	4100 K	130

*ask for stock

Watt	Part NO.	Color	CRI Typ.	Test Current (mA)	V _F (V) Typ.	Bin Code	CCT		2θ½[°]
							Min.	Max.	
1	PM2E-1LWE	White	70	350	3.3	V2/W1/W2/X1	4100 K	10000 K	130
	PM2E-1LVE-R7	Warm White	70	350	3.3	V1/V2/W1/W2*	2700 K	4100 K	130
	PM2E-1LVE-R8	Warm White	80	350	3.3	U2/V1/V2/W1*	2700 K	4100 K	130

*ask for stock

Mono Color [PM2B series]

Watt	Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Bin Code (lm)	λ _D		2θ½[°]
						Min.	Max.	
1	PM2B-1LRE	Red	350	2.2	S1/S2/T1*	613.5 nm	631 nm	130
	PM2B-1LAE	Amber	350	2.2	S1/S2/T1/T2*/U1*	587 nm	597 nm	130
	PM2B-1LGE	Green	350	3.4	U1/U2/V1/V2/W1*	515 nm	535 nm	130
	PM2B-1LCE	Cyan	350	3.4	T1/T2/U1*	495 nm	515 nm	130
	PM2B-1LBE	Blue	350	3.3	P/Q*	455 nm	475 nm	130
3	PM2B-3LRE-SD	Red	700	2.5	U1*/U2/V1/V2*	613.5 nm	631 nm	130
	PM2B-3LAE-SD	Amber	700	2.5	U2/V1/V2/W1*	587 nm	597 nm	130
	PM2B-3LGE-SD	Green	700	3.8	W1*/W2/X1/X2*	515 nm	535 nm	130
	PM2B-3LCE-SD	Cyan	700	3.8	V1/V2/W1*	495 nm	515 nm	130
	PM2B-3LBE-SD	Blue	700	3.5	R/S1/S2*	455 nm	475 nm	130

*ask for stock

Watt	Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Bin Code (mW)	λ _P		2θ½[°]
						Min.	Max.	
1	PM2L-1LLE-LC	UV	350	3.4	Q/R/S*	390 nm	410 nm	130
	PM2B-1LDE	Royal Blue	350	3.3	R/S*	450 nm	460 nm	130
	PM2B-1LEE	Cherry Red	350	2.0	M/N/P*	720 nm	740 nm	130
	PM2B-1LME	Crimson	350	2.2	N/P/Q*	650 nm	670 nm	130
2	PM2B-2LJE-SD	IR850	1000	1.9	S/T/U*	840 nm	870 nm	130
	PM2B-2LKE-SD	IR940	1000	1.9	S/T*	925 nm	955 nm	130
3	PM2L-3LLE-SD	UV	700	3.7	U/V/W*	390 nm	410 nm	130
	PM2B-3LDE-SD	Royal Blue	700	3.6	U/V/W*	450 nm	460 nm	130
	PM2B-3LEE-SD	Cherry Red	700	2.3	R/S*	720 nm	740 nm	130

*ask for stock

Mono Color [PM2E series]

Watt	Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Bin Code (lm)	λ _D		2θ½[°]
						Min.	Max.	
1	PM2E-1LRE	Red	350	2.2	S1/S2/T1*	613.5 nm	631 nm	130
	PM2E-1LAE	Amber	350	2.2	S1/S2/T1/T2*/U1*	587 nm	597 nm	130
	PM2E-1LGE	Green	350	3.4	U1/U2/V1/V2/W1*	515 nm	535 nm	130
	PM2E-1LBE	Blue	350	3.3	P/Q*	455 nm	475 nm	130

Watt	Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Bin Code (mW)	λ _P		2θ½[°]
						Min.	Max.	
1	PM2E-1LLE	UV	350	3.4	Q/R/S*	390 nm	410 nm	130
2	PM2E-2LJE-SD	IR850	1000	1.9	S/T/U*	840 nm	870 nm	130

*ask for stock

AC-HV LED

High voltage LED series is designed for applications including luminaires that have space limitations and sensitive to cost. High Voltage LED is also designed for outdoor applications, such as street lamp, barn light, etc.



27 AC LED

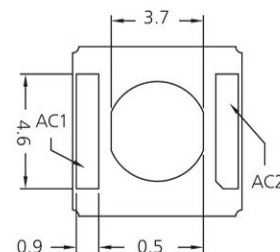
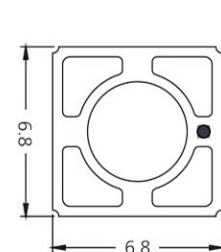
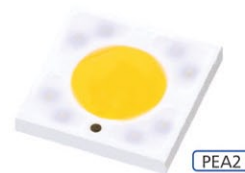
29 HV LED 4050
HV PHENIX 3030
HV PHENIX 3535

AC LED PEA2



Features

- High Color rendering index
- Follow ANSI C78.788.2008 Chromaticity co-ordinates
- Good color uniformity
- RoHS compliant
- No UV
- Industry best moisture sensitivity level - JEDEC Level 1



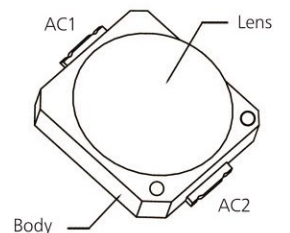
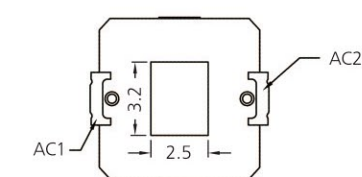
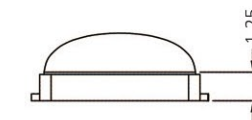
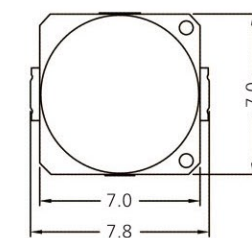
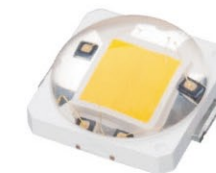
Part NO.	Color	CRI Min.	Test Current (mA-rms)	V _{F-rms} (V)	CCT		2θ½[°]
					Min.	Max.	
PEA2-3FWE	White	80	12mA-rms	210	6020K	7050K	140
PEA2-3FNE	Neutral White	80	12mA-rms	210	3710K	4260K	140
PEA2-3FVE	Warm White	80	12mA-rms	210	2580K	3220K	140

AC LED PTA1 / PTA2



Features

- High Color rendering index
- Follow ANSI C78.788.2008 Chromaticity co-ordinates
- Good color uniformity
- RoHS compliant
- No UV
- Industry best moisture sensitivity level - JEDEC Level 1



Part NO.	Color	CRI Min.	Test Current (mA-rms)	V _{F-rms} (V)	Lumens		CCT		2θ½[°]
					Min.	Typ.	Min.	Max.	
PTA1-3LWE	White	80	30mA-rms	93	170	190	6130K	6890K	140
PTA1-3LVE	Warm White	80	30mA-rms	93	170	183	2630K	2820K	140
PTA2-3LWE	White	80	10mA-rms	205	140	170	4730K	5330K	140
PTA2-3LNE	Neutral White	80	10mA-rms	205	140	170	3780K	4150K	140
PTA2-3LVE	Warm White	80	10mA-rms	205	130	150	2650K	2800K	140

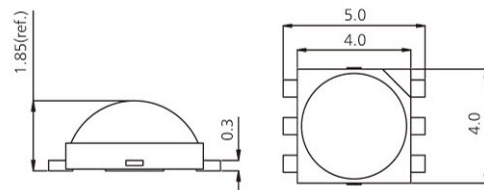
AC-HV LED

HV LED 4050



Features

- Size : 4.0 x 5.0mm
- High voltage and high efficiency (1W 160lm/w, 2W 140lm/w)
- Good color uniformity
- industry's best thermal material
- Industry best moisture sensitivity level - JEDEC Level 1



Watt	Part NO.	Color	CRI	Test Current (mA)	V _F (V) Typ.	LM/W@45mA Typ.	CCT		2θ½[°]
			Min.				Min.	Max.	
2.2	PPDV-3LWE-Y01	White	70	45	47	142	5030K	6535K	140
	PPDV-3LWE-Y03	White	70	45	47	142	3710K	5030K	140
	PPDV-3LVE-Y01	Warm White	82	45	47	128	2580K	3220K	140

Watt	Part NO.	Color	CRI	Test Current (mA)	V _F (V) Typ.	LM/W@45mA Min.	CCT		2θ½[°]
			Min.				Min.	Max.	
3	PPDV-3LWE-6Y01	White	70	66	46	120	5000K	6480K	140
	PPDV-3LNE-6Y01	Neutral White	70	66	46	115	3710K	5030K	140
	PPDV-3LVE-6Y01	Warm White	73	66	46	105	2580K	3220K	140

HV PHENIX 3030

Features

- Size : 3.0 x 3.0mm
- Voltage Range : 45V



Photometric Luminous Flux Bin II (PHENIX)

Bin	Min	Max
W1	130	140
W2	140	155
X1	155	170
X2	170	185
Y1	185	200
Y2	200	220

Watt	Part NO.	Color	CRI	Test Current (mA)	V _F (V) Typ.	Bin Code	CCT		2θ½[°]	Max Current (mA)
			Min.				Min.	Max.		
2	PJDV-2FWE-3R7	White	70	33	46	X2/Y1/Y2*/Z1*	4745 K	6020 K	120	40
	PJDV-2FNE-3R7	Neutral White	70	33	46	X2/Y1/Y2*/Z1*	3700 K	4250 K	120	40
	PJDV-2FVE-3R8	Neutral White	80	33	46	X1/X2/Y1*/Y2*	3700 K	4250 K	120	40
	PJDV-2FVE-3R7	Warm White	70	33	46	X1/X2/Y1*/Y2*	2580 K	3250 K	120	40
	PJDV-2FVE-3R8	Warm White	80	33	46	W2/X1/X2*/Y1*	2580 K	3250 K	120	40

*ask for stock

HV PHENIX 3535

Features

- Size : 3.45 x 3.44 mm
- Voltage Range : 45V



Watt	Part NO.	Color	CRI	Test Current (mA)	V _F (V) Typ.	Bin Code	CCT		2θ½[°]	Max Current (mA)
			Min.				Min.	Max.		
2	PKDV-2LWE-3BR7	White	70	33	45.6	Y1/Y2/Z1*/Z2*	4745 K	6020 K	130	50
	PKDV-2LNE-3BR7	Neutral White	70	33	45.6	Y1/Y2/Z1*/Z2*	3700 K	4250 K	130	50
	PKDV-2LNE-3BR8	Neutral White	80	33	45.6	X1/X2/Y1*/Y2*	3700 K	4250 K	130	50
	PKDV-2LVE-3BR8	Warm White	80	33	45.6	X1/X2/Y1*/Y2*	2580 K	3250 K	130	50

*ask for stock

GU10

CRAB package



- Size:4.0x5.0 mm
- Good color uniformity
- RoHs compliant
- High Voltage LED is applicable to GU10
- Lead free reflow soldering



Watt	Part NO.	Color	CRI Typ.	Test Current(mA)	V _F (V) Typ.	Lumens Min. Typ.	Bin Code	CCT Min. Max.	2θ½[°]
4	PND1-4LVE-7SC	Warm White	80	40	106	420 470	V1/V2*/W1*	2940 K 3150 K	140

*ask for stock

COB HV S series



- Size:15.0x12.0 mm
- High Voltage LED is applicable to GU10



Watt	Part NO.	Color	CRI Min.	Test Current(mA)	V _F (V) Typ.	Lumens Min. Typ.	CCT Typ.	2θ½[°]
4	PDSB-4FWL-B91P	White	80	30	136	500 530	6500K 5000K	120
	PDSB-4FNL-B91P	Neutral White	80	30	136	500 530	4000K	120
	PDSB-4FVL-B91P	Warm White	80	30	136	490 520	3000K	120
7	PDSB-7FWL-BC0P	White	80	38	182	720 800	6500K 5630K 5000K	120
	PDSB-7FNL-BC0P	Neutral White	80	38	182	710 780	4000K	120
	PDSB-7FVL-BC0P	Warm White	80	38	182	700 760	3000K 2700K	120

MR16

COB S series

Features

- Size:12.0x8.0mm
- 100% dimension compatible with Sharp Petite Zenigate.
- 9V is applicable to MR16



Watt	Part NO.	Color	CRI Min.	Test Current(mA)	V _F (V) Typ.	Lumens Min. Typ.	CCT Typ.	2θ½[°]
5	PDSA-5FWL-N35N	White	70	500	9	590 665	5700K	120
	PDSA-5FNL-B35P	Neutral White	80	500	9	520 580	4000K	120
	PDSA-5FVL-B35P	Warm White	80	500	9	475 555	3000K 2940K 2700K	120
	PDSA-5FVL-D35P	Warm White	93	500	9	390 455	3000K 2940K 2700K	120

HORNET

Features

- Size:9.1x7.0mm
- 9V is applicable to MR16



Watt	Part NO.	Color	CRI Min.	Test Current(mA)	V _F (V) Typ.	LUMENS Min. Typ.	CCT Min. Max.	2θ½[°]
4	PC8N-4LWE-24	White	70	480	9.3	570 640	4745 K 7050 K	140
	PC8N-4LNE-24R8	Neutral White	80	480	9.3	485 550	3710 K 4745 K	140
	PC8N-4LVE-24R8	Warm White	80	480	9.3	450 520	2630 K 3150 K	140
6	PC8N-6LWE-T18	White	70	600	9.5	730 820	4745 K 6020 K	140
	PC8N-6LNE-T18R7	Neutral White	70	600	9.5	700 780	3710 K 4260 K	140
	PC8N-6LVE-T18R7	Warm White	70	600	9.5	650 740	2580 K 3100 K	140
	PC8N-6LWE-B24R8	White	80	600	9.2	660 740	4745 K 6020 K	140
	PC8N-6LNE-B24R8	Neutral White	80	600	9.2	650 720	3710 K 4260 K	140
	PC8N-6LVE-B24R8	Warm White	80	600	9.2	600 690	2630 K 3150 K	140

UV LED

ProLight's UV LEDs provide various packages which deliver superior efficiency and precise optical performance. The UV series covers ultraviolet (380-400nm) and violet (400-430nm) light.

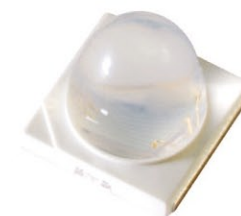
The UV series covers ultraviolet (365-400nm) and violet (400-430nm) light.

PHENIX 3535 NV



Features

- Size : 3.45 x 3.44 mm
- Best thermal material solution
- Best Moisture Sensitivity: JEDEC Level 1



Watt	Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Bin Code (mW)	λP		2θ½[°]
						Min.	Max.	
1	PK2N-1DLE	UV	350	3.4	Q/R/S*	390 nm	410 nm	60

*ask for stock

PHENIX 3535

Features

- Size : 3.45 x 3.44 mm
- RoHS compliant
- Industry best moisture sensitivity level - JEDEC Level 1



Bin @ 350&700mA Radiometric Power Bin (mW)			Bin @ 500mA Radiometric Power Bin (mW)		
Bin	Min	Max	Bin	Min	Max
M	225	275	R1	455	505
N	275	335	R2	505	560
P	335	435	S1	560	620
Q	435	515	S2	620	685
R	515	635	T1	685	755
S	635	755	T2	755	830
T	755	875	U1	830	910
U	875	1050	U2	910	1000
V	1050	1225	V1	1000	1100
W	1225	1400	V2	1100	1210
X	1400	1680			

Watt	Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Bin Code (mW)	λP		2θ½[°]	Max Current (mA)
						Min.	Max.		
1	PK2E-1LLE-VS	UV-S	350	3.5	N/P/Q*	365 nm	370 nm	130	350
	PK2N-1LLE	UV	350	3.4	Q/R/S*	390 nm	410 nm	130	350
3	PK2N-3LLE-VS	UV-S	500	3.6	R1/R2/S1*/S2*	365 nm	370 nm	130	700
	PK2N-3LLE-VM	UV-M	500	3.5	T2/U1/U2*/V1*	380 nm	390 nm	130	700
	PK2N-3LLE-V	UV	500	3.4	U1/U2/V1*/V2*	390 nm	400 nm	130	700
	PK2N-3LLE-SD	UV	350	3.2	Q/R/S*	390 nm	410 nm	130	700
	PK2N-3LLE-L	UV-L	350	3.2	Q/R/S*	415 nm	435 nm	130	700

*ask for stock

PROEON



Features

- Size : 7.26 x 14.2 mm
- RoHS compliant
- Industry best moisture sensitivity level - JEDEC Level 1



Watt	Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Bin Code (mW)	λP		2θ½[°]
						Min.	Max.	
1	PM2L-1LLE-VS	UV-S	350	3.5	N/P/Q*	365nm	370nm	130
	PM2E-1LLE-S	UV-S	350	3.5	M/N*/P*	365nm	375nm	130
	PM2L-1LLE-LC	UV	350	3.4	Q/R/S*	390nm	410nm	130
	PM2E-1LLE	UV	350	3.4	Q/R/S*	390nm	410nm	130
3	PM2L-3LLE-VS	UV-S	700	3.7	R/S/T*/U*	365nm	370nm	130
	PM2L-3LLE-VM	UV-M	700	3.6	U/V/W*/X*	380nm	390nm	130
	PM2L-3LLE-V	UV	700	3.5	V/W/X*	390nm	400nm	130
	PM2L-3LLE-SD	UV	700	3.7	U/V/W*	390nm	410nm	130

*ask for stock

IR LED

ProLight's IR LEDs provide various packages which deliver superior efficiency and precise optical performance. The IR portfolio covers infrared ray 925-955nm and 840-870nm.



- 35 PHENIX 3535
- 36 PROEON
- 37 PROEON E

Radiometric Power Bin (mW)

Bin	Min	Max
M	225	275
N	275	335
P	335	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

PHENIX 3535

Features

- Size : 3.45 x 3.44 mm
- RoHS compliant
- Industry best moisture sensitivity level - JEDEC Level 1



PK2N-2LJE-SD

PK2N-2DJE-SD

Watt	Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Bin Code (mW)	λ _P		2θ½[°]	Max Current (mA)
						Min.	Max.		
2	PK2N-2LJE-SD	IR 850	350	1.6	M/N/P*	840 nm	870 nm	130	1000
	PK2N-2DJE-SD	IR 850	350	1.6	M/N*	840 nm	870 nm	45	1000

*ask for stock

PROEON

Features

- Size : 7.26 x 14.2 mm
- RoHS compliant
- Industry best moisture sensitivity level - JEDEC Level 1



Watt	Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Bin Code (mW)	λ _P		2θ½[°]
						Min.	Max.	
2	PM2B-2LJE-SD	IR850	1000	1.9	S/T/U*	840 nm	870 nm	130
	PM2B-2LKE-SD	IR940	1000	1.9	S/T*	925nm	955 nm	130

*ask for stock

PROEON E

Features

- Size : 7.26 x 14.2 mm
- RoHS compliant
- Industry best moisture sensitivity level - JEDEC Level 1



Watt	Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Bin Code (mW)	λ _P		2θ½[°]
						Min.	Max.	
2	PM2E-2LJE-SD	IR 850	1000	1.9	S/T/U*	840 nm	870 nm	130

*ask for stock

FOOD LIGHTING

FOOD LIGHTING

- Features
- RoHS compliant
 - No UV
 - Lead free reflow soldering
- Good color uniformity
 - Low Voltage DC operated
 - Industry best moisture sensitivity level - JEDEC Level 1

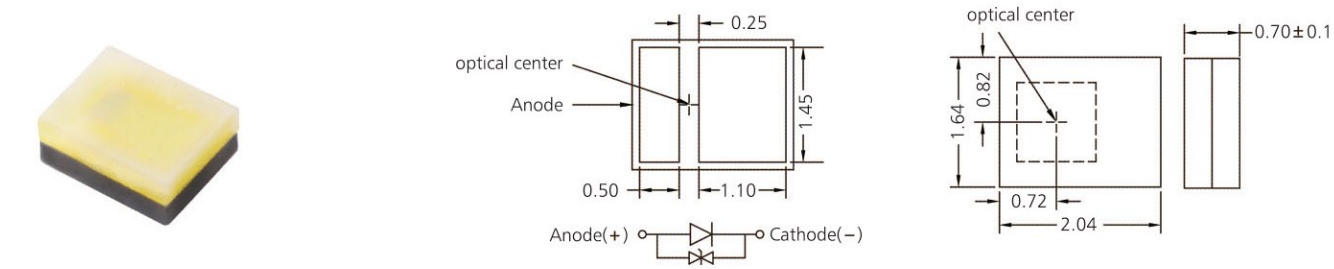


Watt	Part NO.	Color	CRI	Test Current (mA)	V _F (V) Typ.	Bin Code (lm)	CCT		2θ½[°]
			Min.				Min.	Max.	
0.2	PS2P-TFPE-FMR9	Fresh Meat	90	60	3.2	M2/N1/N2*	3100 K	4000 K	120
	PS2P-TFPE-GP	Gold Plus	80	60	3.2	N2/P1/P2*	2200 K	2500 K	120

*ask for stock

FLASH 2016

Features
ProLight Flash LEDs designed with the best thermal conductivity material and innovative spray coating technology to provide outstanding light color uniformity.



Watt	Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Lumens.	CCT Typ.	2θ½[°]
					Min.		
3	PF2N-4FWE-05	White	1000	3.65	200	5700 K	125

PLANT GROW

PROEON

- Features
- Size : 7.26x14.2mm
 - Best thermal material solution
 - RoHS compliant
 - Industry best moisture sensitivity level - JEDEC Level 1

Watt	Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Bin Code (mW)	λ _P		2θ½[°]
						Min.	Max.	
1	PM2B-1LDE	Royal Blue	350	3.3	R/S*	450 nm	460 nm	130
	PM2B-1LEE	Cherry Red	350	2.0	M/N/P*	720 nm	740 nm	130
	PM2B-1LME	Crimson	350	2.2	N/P/Q*	650 nm	670 nm	130
3	PM2B-3LDE-SD	Royal Blue	700	3.6	U*/V/W*	450 nm	460 nm	130
	PM2B-3LEE-SD	Cherry Red	700	2.3	R/S*	720 nm	740 nm	130

*ask for stock

PHENIX 3535

- Features
- Size : 3.45x3.44mm
 - Best thermal material solution
 - RoHS compliant
 - Industry best moisture sensitivity level - JEDEC Level 1

Watt	Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Bin Code (mW)	λ _P		2θ½[°]	Max Current (mA)
						Min.	Max.		
3	PK2N-3LDE-SD	Royal Blue	350	3.1	R/S*	450 nm	460 nm	130	700
	PK2N-3LEE-SD	Cherry Red	350	2.0	M/N/P*	720 nm	740 nm	130	700
	PK2N-3LME-SD	Crimson	350	2.2	N/P/Q*	650 nm	670 nm	130	700
4	PK2N-4LDE-SD	Royal Blue	350	3.1	R/S*	450 nm	460 nm	130	1000
	PK2N-4LME-WSD	Crimson	350	2.2	N/P/Q*	650 nm	670 nm	130	1000

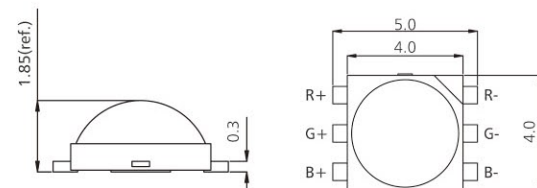
*ask for stock

FULL COLOR

CRAB RGB IN 1

Features

- No UV
- Long lifetime
- R, G, B three color in one Package
- RoHS compliant
- Lead free reflow soldering
- Low Voltage DC operated
- Industry best moisture sensitivity level - JEDEC Level 1

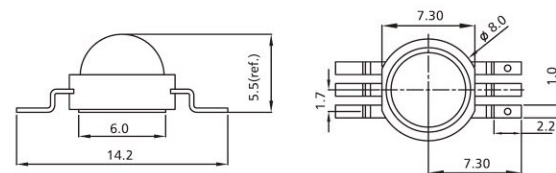


Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Lumens		λD		2θ _{1/2} [°]
				Min.	Typ.	Min.	Max.	
PP6N-TFFE-D60	Red	20	2.2	2.9	3.4	613.5 nm	631 nm	120
	Green	20	3.2	5.5	6.5	515 nm	535 nm	120
	Blue	20	3.1	0.9	1.1	455 nm	475 nm	120
PP6N-FFFE-D60	Red	40	2.5	5.1	6.0	613.5 nm	631 nm	120
	Green	40	3.6	9.4	11.0	515 nm	535 nm	120
	Blue	40	3.5	1.5	1.9	455 nm	475 nm	120
PP6N-1LFE-P	Red	150	2.2	23	27	620 nm	630 nm	140
	Green	150	3.3	32	38	525 nm	535 nm	140
	Blue	150	3.2	7.5	9	455 nm	460 nm	140

PROEON RGB IN 1

Features

- No UV
- Long lifetime
- R, G, B three color in one Package
- RoHS compliant
- Lead free reflow soldering
- Low Voltage DC operated
- Industry best moisture sensitivity level - JEDEC Level 1



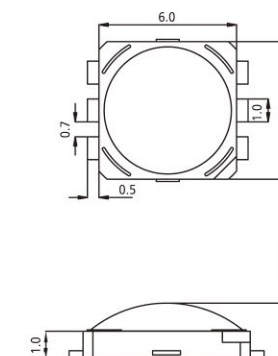
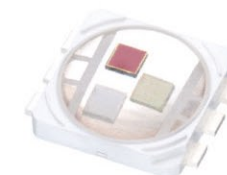
Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Lumens		λD		2θ _{1/2} [°]
				Min.	Typ.	Min.	Max.	
PM6B-3LFE	Red	350	2.2	43	50	620 nm	630 nm	130
	Green	350	3.3	73	85	520 nm	530 nm	130
	Blue	350	3.2	17	20	460 nm	465 nm	130



BUTTERFLY RGB IN 1

Features

- No UV
- Long lifetime
- R, G, B three color in one Package
- RoHS compliant
- Lead free reflow soldering
- Low Voltage DC operated
- Industry best moisture sensitivity level - JEDEC Level 1



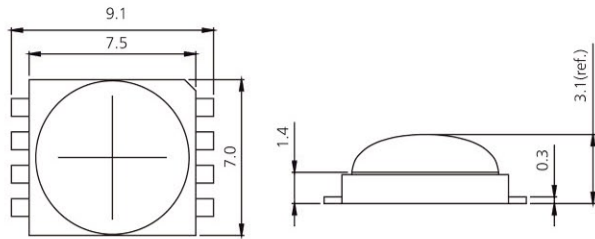
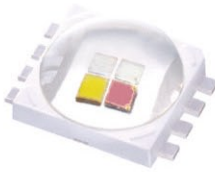
Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Lumens		λD		2θ _{1/2} [°]
				Min.	Typ.	Min.	Max.	
PF6N-9LFE	Red	700	2.5	93	110	613.5 nm	631 nm	140
	Green	700	3.7	148	175	515 nm	535 nm	140
	Blue	700	3.5	34	40	455 nm	475 nm	140

HORNET 4 COLORS IN 1



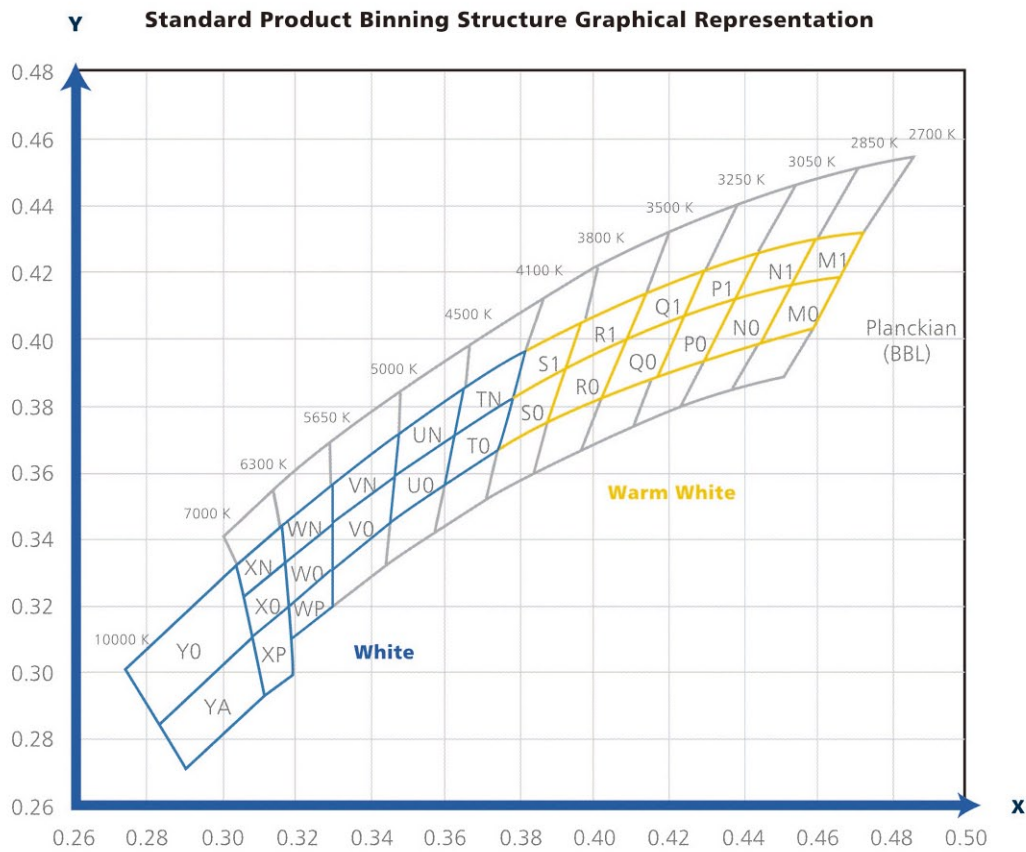
Features

- Industry first multichips color LED
- Best color mixing performance
- Thermal resistance : 3°C/W IR-Reflowable
- MSL : JEDEC 1
- Superior EDS Protection



Watt	Part NO.	Color	Test Current (mA)	V _F (V) Typ.	Lumens		CCT / λD		2θ½[°]
					Min.	Typ.	Min.	Max.	
5	PC8N-5LTE-C	White	350	3.3	103	120	3710 K 6020 K	4260 K 7050 K	140
		Red	350	2.3	45	52	620 nm	630 nm	140
		Green	350	3.4	78	92	520 nm	530 nm	140
		Blue	350	3.3	17	20	455 nm	465 nm	140
	PC8N-5L4E-C	Amber	350	2.3	54	63	587 nm	595 nm	140
		Red	350	2.3	45	52	620 nm	630 nm	140
		Green	350	3.4	78	92	520 nm	530 nm	140
		Blue	350	3.3	17	20	455 nm	465 nm	140
10	PC8N-10LTE-C	White	350	3.1	120	140	6020 K	7050 K	140
		Red	350	2.3	49	57	620 nm	630 nm	140
		Green	350	3.2	95	112	520 nm	530 nm	140
		Blue	350	3.1	19	22	455 nm	460 nm	140
	PC8N-10LWE-C	White	350	3.1	115	135	6020 K	7050 K	140
		White	350	3.1	115	135	6020 K	7050 K	140
		White	350	3.1	115	135	6020 K	7050 K	140
		White	350	3.1	115	135	6020 K	7050 K	140
	PC8N-10L3E-AWVW	Amber	350	2.3	58	70	587 nm	595 nm	140
		White	350	3.1	115	135	6020 K	7050 K	140
		Warm White	350	3.1	90	106	2930 K	3140 K	140
		White	350	3.1	115	135	6020 K	7050 K	140
	PC8N-10L3E-AWVW	Amber	350	2.3	58	70	587 nm	595 nm	140
		Warm White	350	3.1	90	106	2930 K	3140 K	140
		White	350	3.1	115	135	6020 K	7050 K	140
		Warm White	350	3.1	90	106	2930 K	3140 K	140

STANDARD PRODUCT BINNING STRUCTURE
GRAPHICAL REPRESENTATION



BIN STRUCTURE





Photometric Luminous Flux Bin Structure

Photometric Luminous Flux Bin		
Bin Code	Min(lm)	Max(lm)
A	0.77	1.0
B	1.0	1.3
C	1.3	1.7
D	1.7	2.2
E	2.2	2.9
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
S1	51.7	58.9
S2	58.9	67.2
T1	67.2	76.6
T2	76.6	87.4
U1	87.4	99.6
U2	99.6	113.6
V1	113.6	129.5
V2	129.5	147.7
W1	147.7	168.4
W2	168.4	192
X1	192	218.9
X2	218.9	249.6
Y1	249.6	284.5
Y2	284.5	324.5
Z1	324.5	369.9
Z2	369.9	421.9
Z3	421.9	480
Z4	480	550
Z5	550	630
Z6	630	720
Z7	720	820
Z8	820	940
Z9	940	1070



Radiometric Power Bin Structure

Dominant Wavelength Bin Structure (λd)			
Color	Bin Code	Min(nm)	Max(nm)
Royal Blue	4	445	450
	5	450	455
	6	455	460
Blue	A	455	460
	1	460	465
	2	465	470
	3	470	475
Cyan	A	495	500
	1	500	505
	2	505	510
Green	3	510	515
	A	515	520
	1	520	525
Amber	2	525	530
	3	530	535
	2	587.0	589.5
Red	4	589.5	592.0
	6	592.0	594.5
	7	594.5	597.0
Crimson	2	613.5	620.5
	4	620.5	631.0
Peak Wavelength Bin Structure (λp)			
Color	Bin Code	Min(nm)	Max(nm)
UV	1	390	395
	2	395	400
	3	400	405
	4	405	410
UV-L	1	415	420
	2	420	425
	3	425	430
	4	430	435
Cherry Red	1	650	655
	2	655	660
	3	660	665
	4	665	670
IR 850	1	720	740
IR 940	1	840	870
	1	925	955

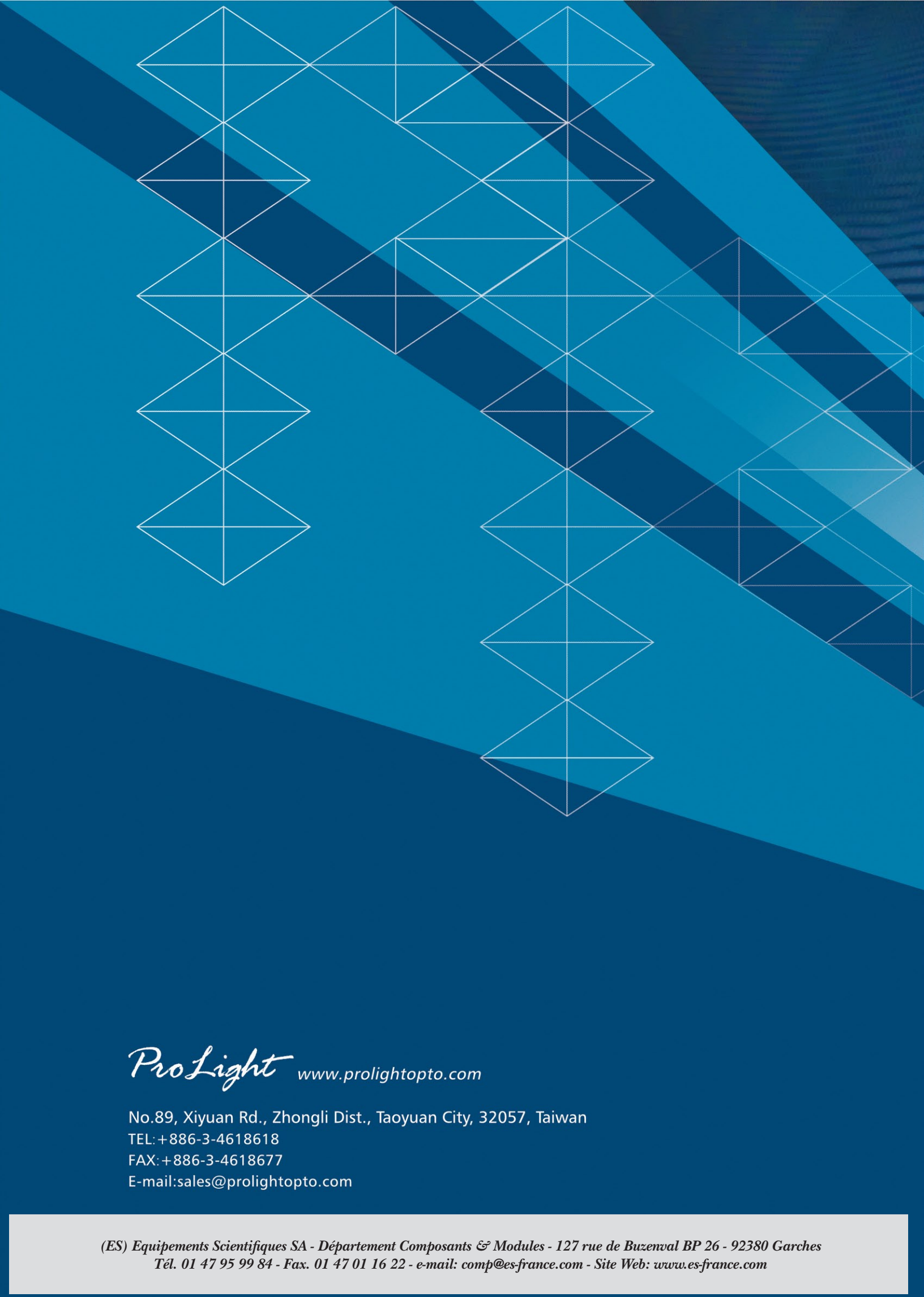
Radiometric Power Bin (mW)		
Bin Code	Min(mW)	Max(mW)
D	30	40
E	40	50
F	50	65
G	65	85
H	85	115
J	115	145
K	145	175
L	175	225
M	225	275
N	275	335
P	335	435
Q	435	515
R	515	635
S	635	755
T	755	875
U	875	1050
V	1050	1225
W	1225	1400
X	1400	1680
Y	1680	2000
Z	2000	2400

ProLight's vision is to be the world class LED lighting supplier, and contribute to the protection of Earth by eco-friendly LED lighting.



ProLight Manufacturer of LED Packaging from **Taiwan**

www.prolightopto.com



ProLight www.prolightopto.com

No.89, Xiyuan Rd., Zhongli Dist., Taoyuan City, 32057, Taiwan

TEL: +886-3-4618618

FAX: +886-3-4618677

E-mail: sales@prolightopto.com