



Part No.: SPL-NNW1-083-63S2

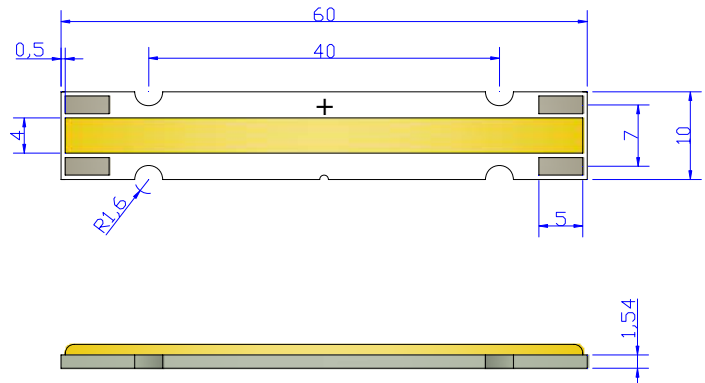


Features:

- High radiometric power per LED
- Very long operating life
(up to 100K hours)
- Low voltage DC operated
- More Energy Efficient than Incandescent
and most Halogen lamps
- Good color uniformity
- NO UV
- Superior ESD protection
- Easy installation with Screws
- High Heat dissipation Efficiency

Typical Applications:

- Reading lights(car,bus,aircraft)
- Portable(flashlight,bicycle)
- Automotive Exterior(Stop-Tail-Turn,
CHMSL,Mirror Side Repeat)
- Decorative/Entertainment
- Dental curing lights
- Uplighters/Downlighters
- Bollards/Security/Garden
- Cove/Undershelf/Task
- Indoor/Outdoor Commercial and Residential Architectural
- Automotive Ext(stop-Tail-Turn)
- Lcd backlights
- Street Lamp

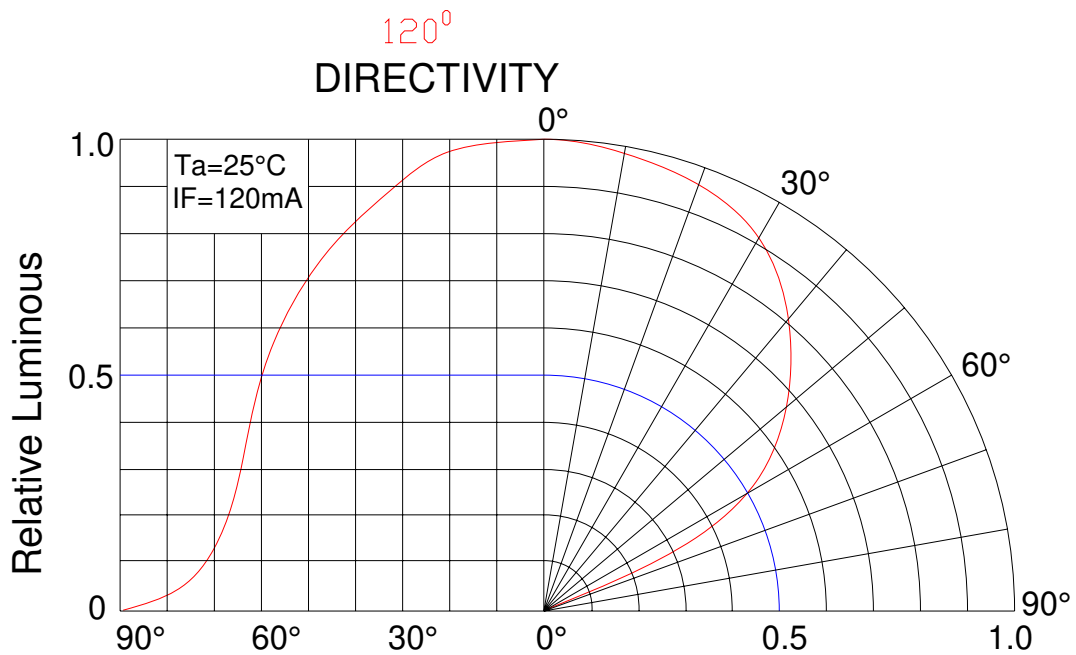


NOTE:

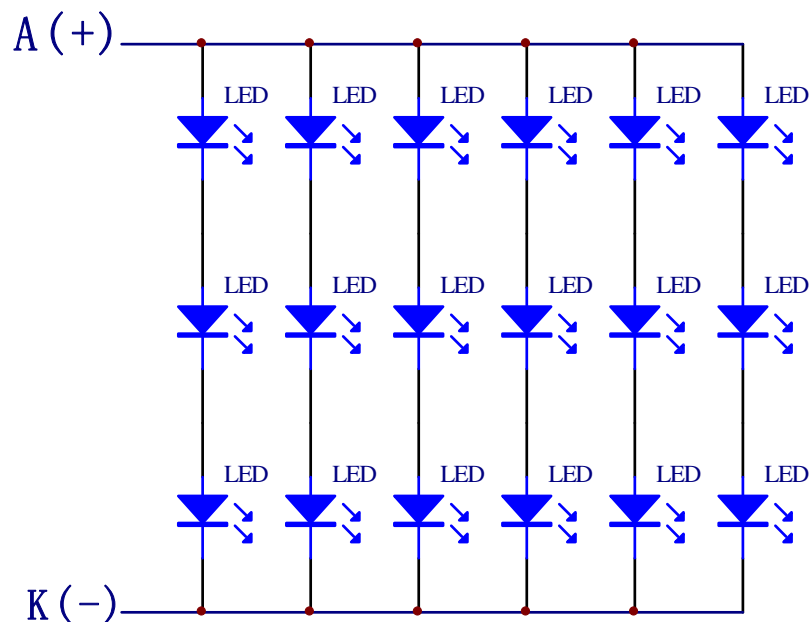
- All dimensions are millimeter.
- Tolerance is $\pm 0.1\text{mm}$ unless otherwise noted
- It is strongly recommended that the temperature of lead be not higher than 55°C
- The appearance and specifications of the product may be modified for improvement without notice.



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Circuit diagram:





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Absolute maximum ratings (Ta = 25°C)

Parameter	Symbol	Test Condition	Value		Unit
			Min.	Max.	
DC Forward Current	IF	----	----	120	mA
Peak Pulse Current	Ipeak	Duty=0.1, 1kHz	----	240	mA
Power Dissipation	Pd	----	----	1.2	W
LED Junction Temperature	Tj	----	----	120	°C
Operating Temperature	Topr	----	-25	+80	°C
Storage Temperature	Tstr	----	-40	+120	°C
Luminous Decay	---	50000H/IF=120mA (Under 50°C)	----	20	%
ESD Sensitivity	---	HBM	8000	---	V
Soldering Temperature	---	-----	220°C for 5 Seconds max		

Electrical and optical characteristics (Ta = 25°C)

Parameter	Symbol	Test Condition	Value			Unit
			Min.	Typ.	Max.	
Forward Voltage	VF	IF = 120mA	9.0	9.5	10	V
Luminous Flux	Φv		60	90	-----	lm
Viewing Angle	2θ 1/2		----	120	----	Deg.
Color Temperature	CCT		3600	-----	5000	K
Color Rendering Index	Ra		75			-

Luminous Flux Bins (Ta = 25°C)

Unit:lm

Bin	L	M	N	P
Min	70	80	100	120
Max	80	100	120	140

Chromaticity Coordinates Ranks(IF=120mA Ta=25°C)

Bin	x1	y1	x2	y2	x3	y3	x4	y4
WP1	0.4017	0.4023	0.3991	0.3943	0.4046	0.3970	0.4074	0.4051
WP2	0.3991	0.3943	0.3966	0.3862	0.4018	0.3888	0.4046	0.3970
WP3	0.3966	0.3862	0.3941	0.3783	0.3990	0.3806	0.4018	0.3888
WP4	0.3941	0.3783	0.3915	0.3702	0.3962	0.3725	0.3990	0.3806
WQ1	0.3961	0.3995	0.3938	0.3916	0.3991	0.3943	0.4017	0.4023



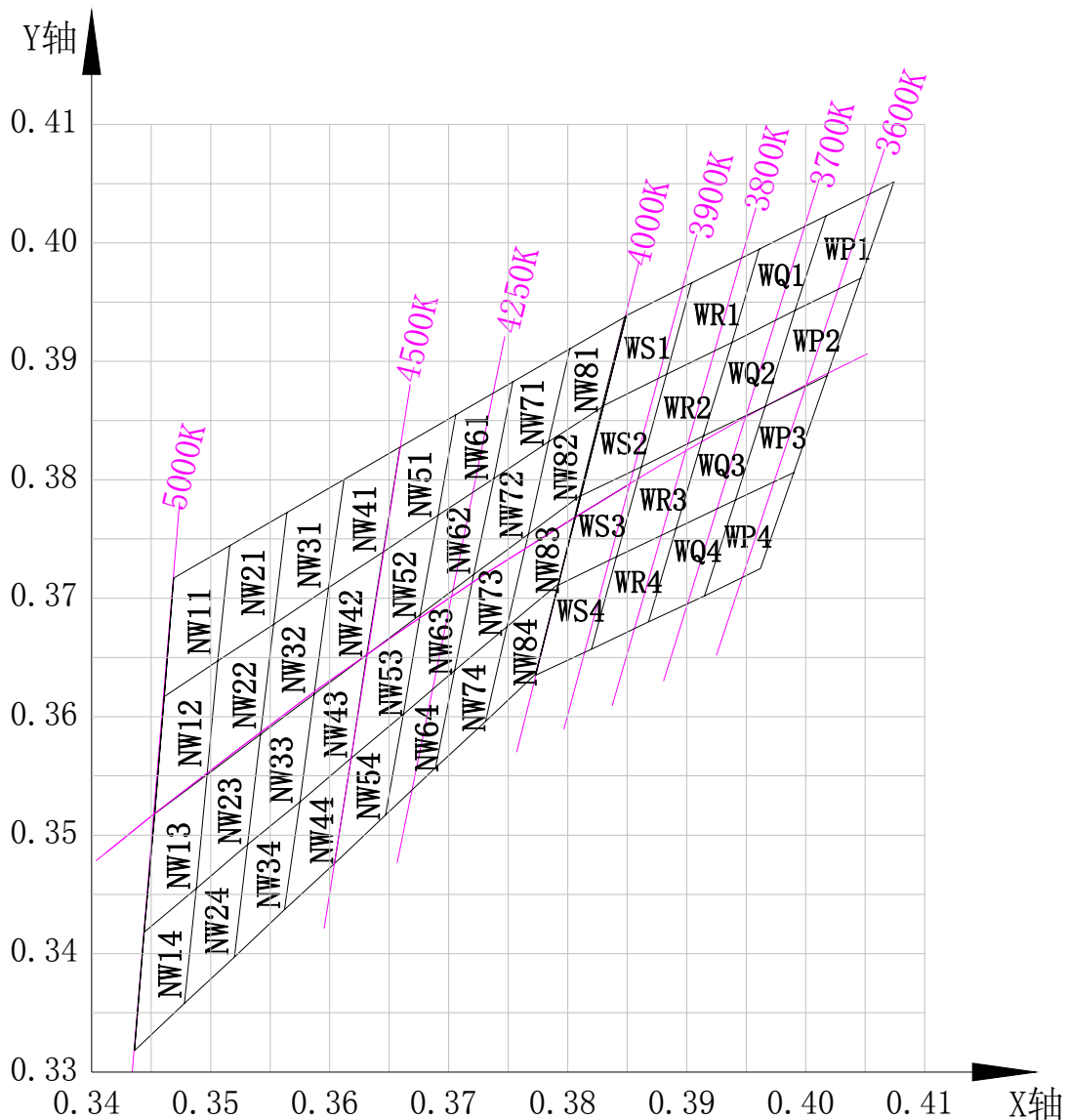
Part No.: SPL-NNW1-083-63S2

Bin	x1	y1	x2	y2	x3	y3	x4	y4
WQ2	0.3938	0.3916	0.3914	0.3837	0.3966	0.3862	0.3991	0.3943
WQ3	0.3914	0.3837	0.3891	0.3759	0.3941	0.3783	0.3966	0.3862
WQ4	0.3891	0.3759	0.3868	0.3680	0.3915	0.3702	0.3941	0.3783
WR1	0.3904	0.3966	0.3883	0.3889	0.3938	0.3916	0.3961	0.3995
WR2	0.3883	0.3889	0.3862	0.3811	0.3914	0.3837	0.3938	0.3916
WR3	0.3862	0.3811	0.3841	0.3735	0.3891	0.3759	0.3914	0.3837
WR4	0.3841	0.3735	0.3820	0.3657	0.3868	0.3680	0.3891	0.3759
WS1	0.3848	0.3938	0.3829	0.3862	0.3883	0.3889	0.3904	0.3966
WS2	0.3829	0.3862	0.3810	0.3786	0.3862	0.3811	0.3883	0.3889
WS3	0.3810	0.3786	0.3792	0.3711	0.3841	0.3735	0.3862	0.3811
WS4	0.3792	0.3711	0.3773	0.3635	0.3820	0.3657	0.3841	0.3735
NW81	0.3802	0.3911	0.3784	0.3832	0.3830	0.3862	0.3849	0.3938
NW82	0.3784	0.3832	0.3767	0.3754	0.3811	0.3787	0.3830	0.3862
NW83	0.3767	0.3754	0.3749	0.3676	0.3792	0.3712	0.3811	0.3787
NW84	0.3749	0.3676	0.3731	0.3596	0.3773	0.3636	0.3792	0.3712
NW71	0.3754	0.3883	0.3738	0.3801	0.3784	0.3832	0.3802	0.3911
NW72	0.3738	0.3801	0.3721	0.3720	0.3767	0.3754	0.3784	0.3832
NW73	0.3721	0.3720	0.3705	0.3639	0.3749	0.3676	0.3767	0.3754
NW74	0.3705	0.3639	0.3689	0.3557	0.3731	0.3596	0.3749	0.3676
NW61	0.3706	0.3855	0.3691	0.3770	0.3738	0.3801	0.3754	0.3883
NW62	0.3691	0.3770	0.3676	0.3686	0.3721	0.3720	0.3738	0.3801
NW63	0.3676	0.3686	0.3662	0.3602	0.3705	0.3639	0.3721	0.3720
NW64	0.3662	0.3602	0.3647	0.3517	0.3689	0.3557	0.3705	0.3639
NW51	0.3659	0.3827	0.3645	0.3739	0.3691	0.3770	0.3706	0.3855
NW52	0.3645	0.3739	0.3631	0.3652	0.3676	0.3686	0.3691	0.3770
NW53	0.3631	0.3652	0.3618	0.3565	0.3662	0.3602	0.3676	0.3686
NW54	0.3618	0.3565	0.3604	0.3476	0.3647	0.3517	0.3662	0.3602
NW41	0.3612	0.3800	0.3599	0.3709	0.3645	0.3739	0.3659	0.3827
NW42	0.3599	0.3709	0.3587	0.3619	0.3631	0.3652	0.3645	0.3739
NW43	0.3587	0.3619	0.3575	0.3528	0.3618	0.3565	0.3631	0.3652
NW44	0.3575	0.3528	0.3562	0.3437	0.3604	0.3476	0.3618	0.3565
NW31	0.3564	0.3772	0.3553	0.3678	0.3599	0.3709	0.3612	0.3800
NW32	0.3553	0.3678	0.3542	0.3585	0.3587	0.3619	0.3599	0.3709
NW33	0.3542	0.3585	0.3531	0.3492	0.3575	0.3528	0.3587	0.3619
NW34	0.3531	0.3492	0.3520	0.3397	0.3562	0.3437	0.3575	0.3528
NW21	0.3516	0.3744	0.3506	0.3647	0.3553	0.3678	0.3564	0.3772
NW22	0.3506	0.3647	0.3497	0.3551	0.3542	0.3585	0.3553	0.3678
NW23	0.3497	0.3551	0.3488	0.3455	0.3531	0.3492	0.3542	0.3585



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Bin	x1	y1	x2	y2	x3	y3	x4	y4
NW24	0.3488	0.3455	0.3478	0.3358	0.3520	0.3397	0.3531	0.3492
NW11	0.3469	0.3717	0.3461	0.3617	0.3506	0.3647	0.3516	0.3744
NW12	0.3461	0.3617	0.3453	0.3518	0.3497	0.3551	0.3506	0.3647
NW13	0.3453	0.3518	0.3444	0.3418	0.3488	0.3455	0.3497	0.3551
NW14	0.3444	0.3418	0.3436	0.3318	0.3478	0.3358	0.3488	0.3455



Note

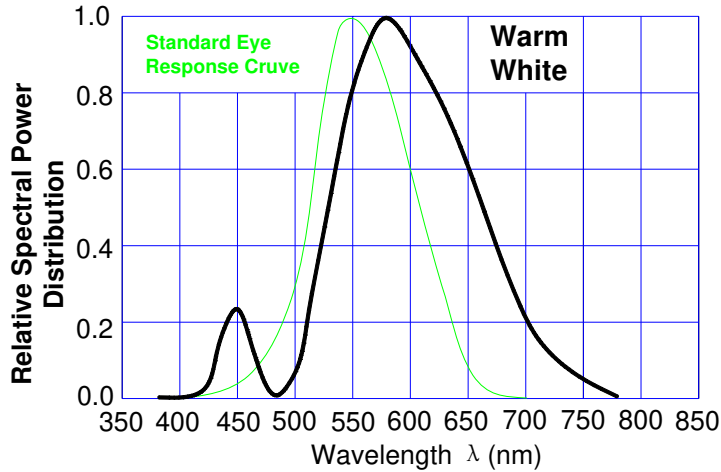
1. Flux is measured with an accuracy of $\pm 15\%$
2. Chromaticity Coordinates (x,y) is measured with an accuracy of ± 0.01
3. Forward Voltage is measured with an accuracy of $\pm 0.2V$
4. It is strongly recommended that the temperature of lead be not higher than $55^{\circ}C$



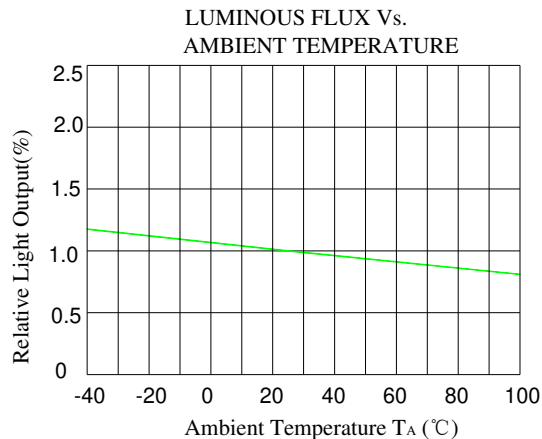
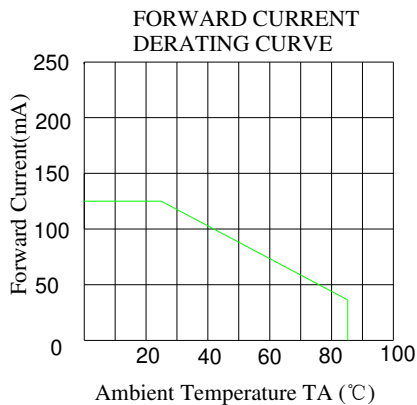
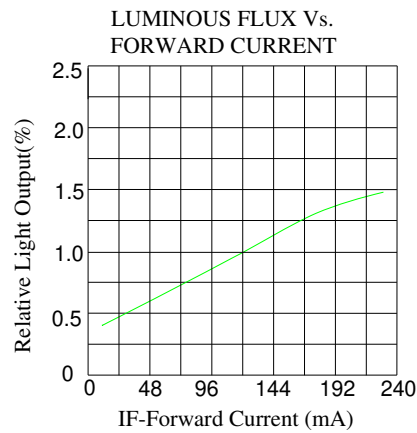
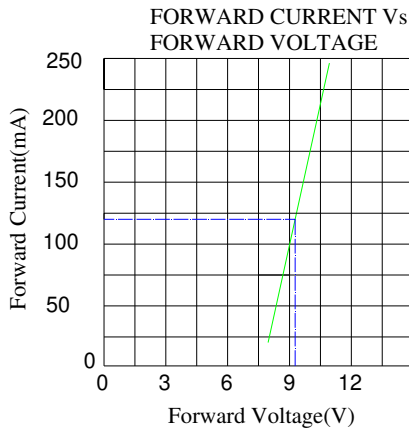
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Color Spectrum, T_J=25°C

Warm White



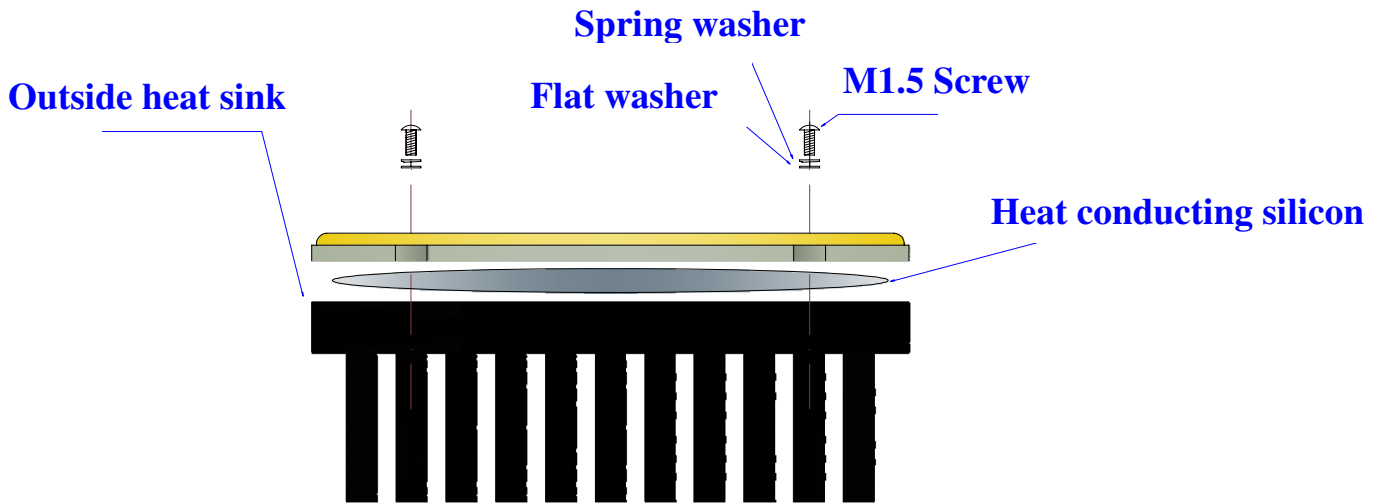
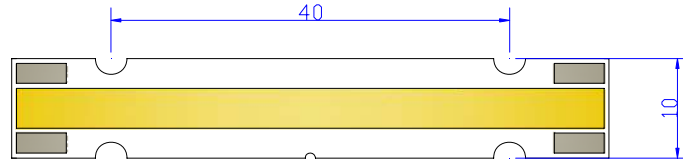
Typical electrical/optical characteristic curves:





Part No.: **SPL-NNW1-083-63S2**

Suggest:



Unit:mm

If you can not solve the heat problem, the product will destroy easily.

Suggest that the surface of the heat sink is $65\text{cm}^2/1\text{W}$