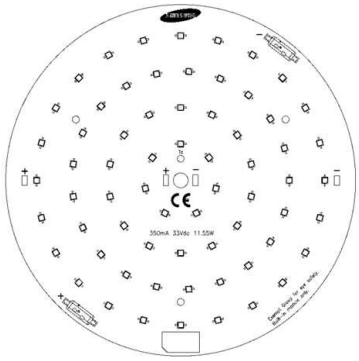
SPECIFICATION



LED Module	
Model Name	**Round-130B**
Type	**33V**
Parts No.	**STIDMW830112112AAA** **STIDMW840112112AAA**

SAMSUNG ELECTRONICS CO,.LTD.

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Gyeonggi-Do 446-711,Korea

Samsung Model :

STIDMW830112112AAA (3000K)

STIDMW840112112AAA (4000K)

CUSTOMER :	
CHECKED	APPROVED
2012 . . .	2012 .3.28

SAMSUNG			
DRAWN	CHECKED		APPROVED
	SALES	QA	
2012.03.20.	2012.3.22.	2012.3.20.	2012.3.20.

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1. Products and Applications

This product is a LED module using Middle Power LEDs for indoor lighting.
This document describes specification and performance of LED module

2. Basic Specification

No.	Item	Specifications	Unit	Remark
1	Dimension	Φ130(D) x 5.7(H)	mm	-
2	Weight	35	g	-
3	Rated life	50,000	hour	L70@ Tc 66℃ , 600mA
4	IP	N/A	-	-

No.	Item		Specifications				Unit	Remark
			Sym.	Min.	Typ.	Max.		
5	Luminous flux	3000K	-	1150	1240	-	lm	- @Ta=25℃ - @If=350mA - Initial test
		4000K		1330	1390			
6	Color Temperature	3000K	CCT	2870	3045	3220	K	
		4000K		3745	3985	4260		
7	Color Rendering Index		CRI	80	-	-	Ra	
8	Efficacy	3000K	-	100	107		lm/W	
		4000K		115	119			
9	Operating Voltage		Vdc	29.7	33	36.3	V	
10	Operating Current		If	-	350	600	mA	-
11	Color Consistency		DOE	-	-	4	step	@Ta=25℃, initial
						5.5	step	@Ta=25℃ After 10,000 Hrs
12	Operating Temperature		Top	-30	-	50	℃	-
13	Operating Humidity		-	-	-	95	%	-
14	Storage Temperature[1)]		Tstg	-40	-	85	℃	-
15	Operating Case Temperature	25,000Hr	Tc	-	-	79.3	℃	L70 If=600mA
		35,000Hr				72.8		
		50,000Hr				66.0		

※ Ta means the ambient temperature.

※ Tolerance of luminous flux becomes ±10% and the measurement tolerance of the color coordinates are ± 0.01.

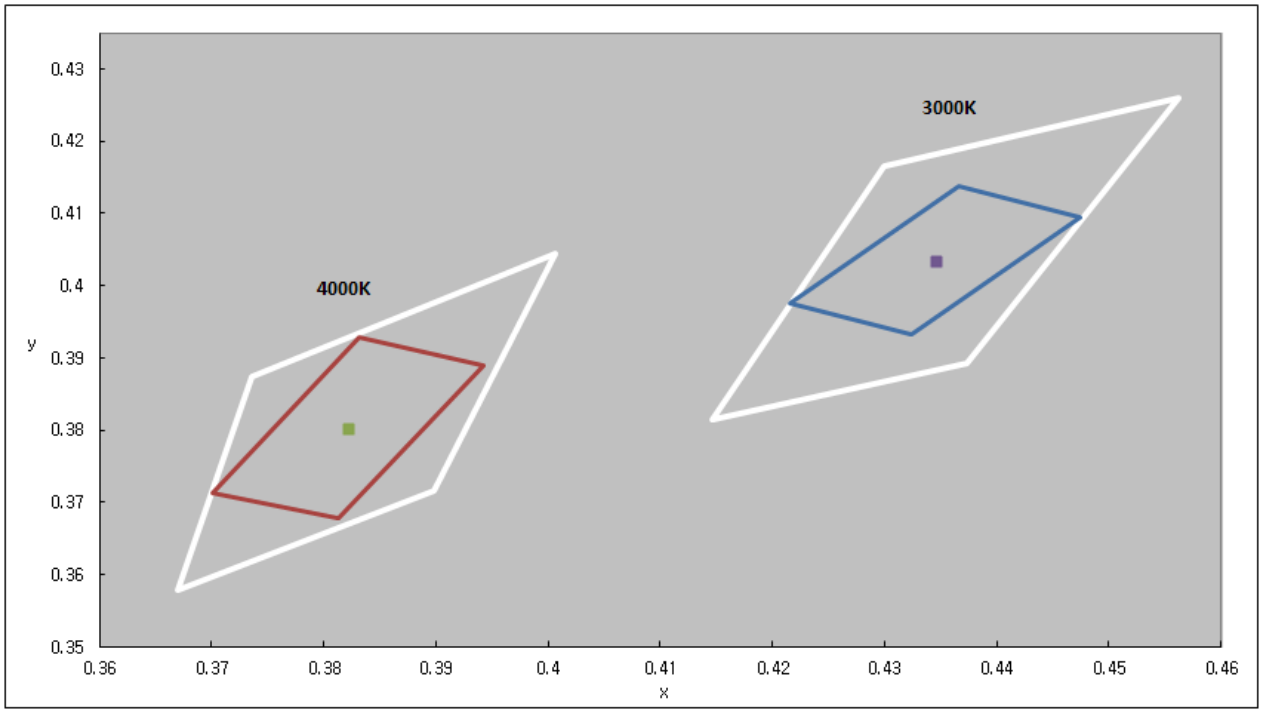
1) Must be used within 6 months of factory conditions ≤30℃/ 60% RH

No.	Item	Specifications	Remark
16	Color Coordinate	see the under table	@Ta=25℃, initial

CCT	3000K		4000K	
	x	y	x	y
Chromaticity Diagram Coord.	0.4216	0.3975	0.3701	0.3713
	0.4324	0.3932	0.3813	0.3677
	0.4475	0.4095	0.3942	0.3889
	0.4366	0.4138	0.3832	0.3928
Center	0.4338	0.4030	0.3818	0.3797

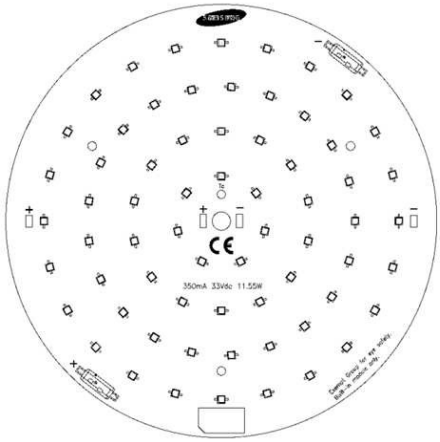
- Accuracy of CL-200 -

ARTICLE	ILLUMINANCE(lx)	COLOR COORDINATES
Accuracy	± 2.0%	x, y : ± 0.0050
Repeatability	± 0.5%	x, y : ± 0.0005

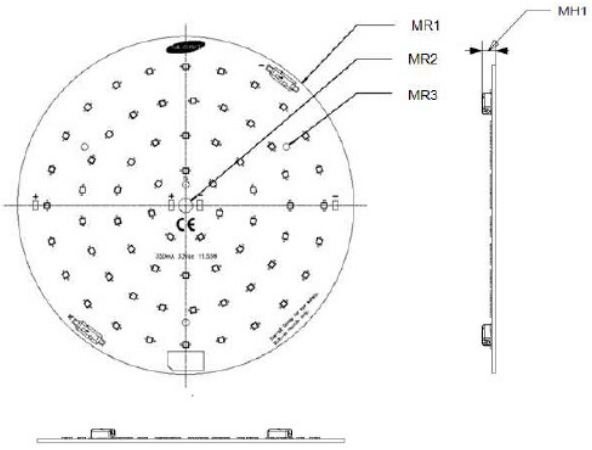


3. Structure and Assembly

3-1. Appearance



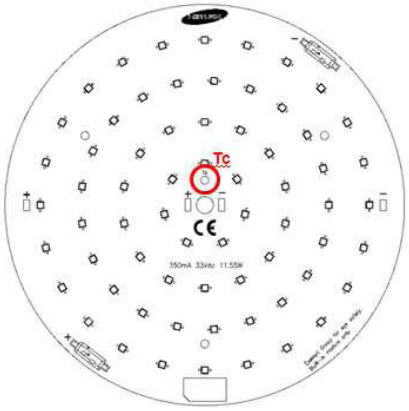
3-2. Dimension



Item		Specifications
MR1	Outer Diameter	130.0 ± 0.2 mm
MR2	Hole size	4.5 ± 0.2 mm
MR3	Screw hole size	2.6 ± 0.2 mm
MH1	Height	5.7 ± 0.2 mm
-	Angle between holes	120°

3-3. Thermal Management

① Tc Point :

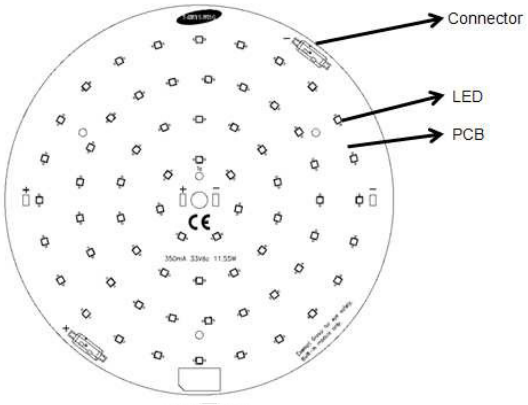


② Tc_life

. LED Module : 66℃ @ 600mA per LED module

※ Tc_life means case temperature for 50,000 hours of lifetime.

3-4. Parts Specification



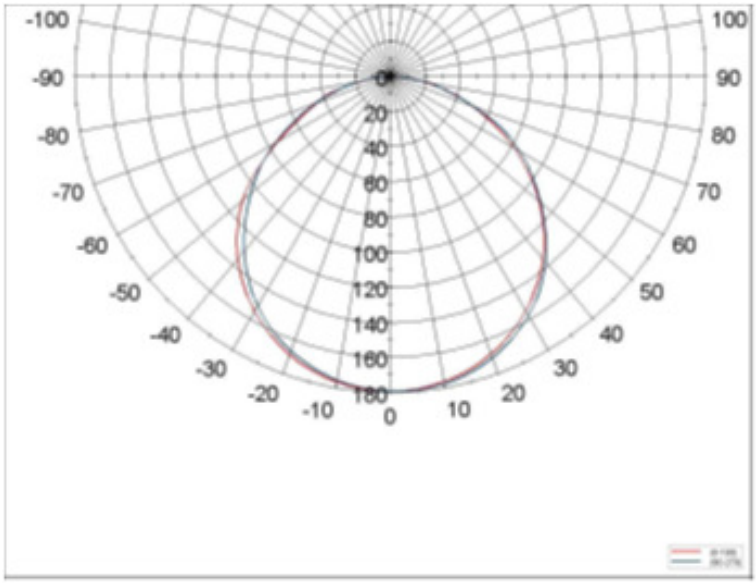
No.	Item	Specifications
1	LED	- Model : Middle-Power LED - Size : 2.3 X 2.3 X 0.7 [mm]
2	Connector	- 1-pin Connector
3	PCB	- FR-4 , D130mm , 1.65T

4. Properties

4-1. Optical

(1) Polar Intensity Diagram

① Bare module (w/o Diffuser) : Beam Angle 115 ± 5 [°]



5. Safety

5-1. Standard

Item	Compliant to	Result / Remark
General	Eye safety : IEC62471	2323 LED
Hazardous Substance & Materials	ROHS	-
Certification	Acquisition of RU	PCB

Samsung-Electronics may make changes to specifications and product descriptions at any time, without notice.

This is the last page.

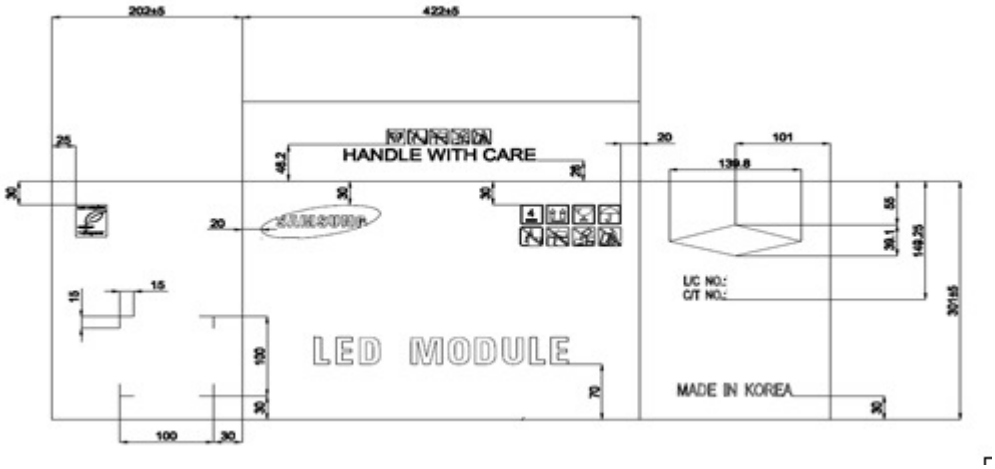
[Appendix-1]Packing

A1-1 Box

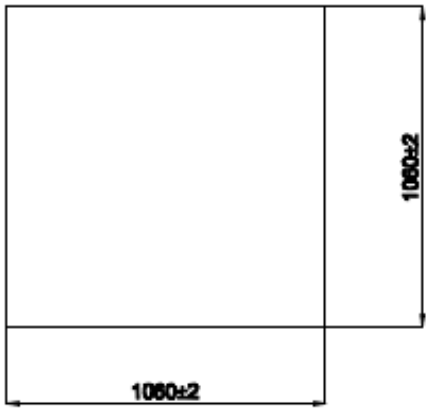
40ea of LED module and Kg in one box

① Out Box

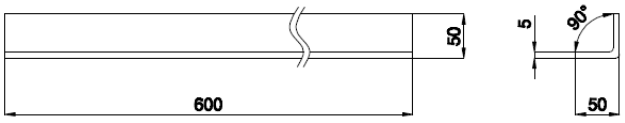
[Dimension : 422(L) x 202(W) x 301(H) mm



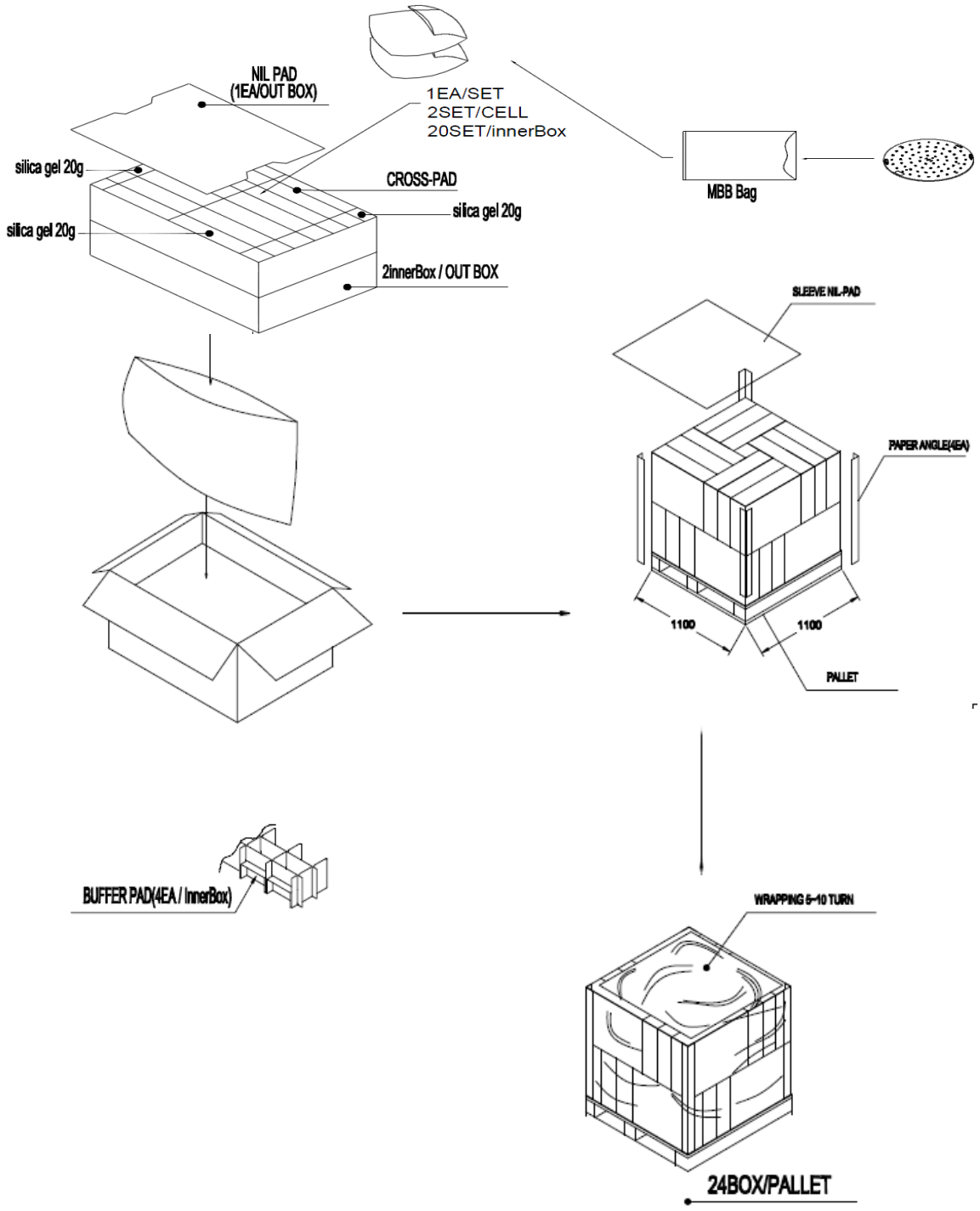
② Sleeve NIL PAD



③ Paper-Angle



A1-2 Pallet : 24 boxes in one pallet



[ea]	Box	Pallet
Quantity	40ea / Box	24Box / Pallet 960ea / Pallet

A1-3 Product

A. Barcode type : Data matrix code with 2D

B. Explanation of Barcode (totally 38 digits with space)

(Ex) : STIDMW830112112AAA L3151000013000K-S01

① ② ③④ ⑤ ⑥ ⑦⑧

Model code(18) + SMT Date(4) + SMT Line No.(1) + Serial Number(5) + Color temperature(5) + LED Maker(2) + GROUP No.(2)

C. Rule of Lot numbering

① Model code : STIDMW830112112AAA

② Space : Space

③ SMT Date

L315 : The product was made in March 15th, 2011

L : 2000, B:2001,.....J:2009, K:2010, L:2011, ... (year)

1:January, 2:February,.....9:September, A:October, B:November, C:December

15 : 01,02,03, ...31 : 1st~31th

④ SMT Line No.

1~9, A,B,C... ※A:10, B:11, C:12 ...

⑤ Serial No.

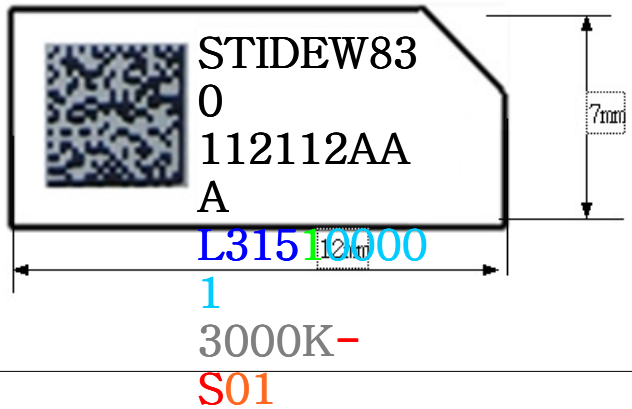
00001~99999 : per working day, Setting as 00001 per each group No.

⑥ Color Temperature - 3000K : Color temperature in work direction of SMT

⑦ Manufacturer

-S : SAMSUNG

⑧ Group No. : Management items by the inside



A1-4 Box

① Model name and Part No.

② ID Number + Packaging information

③ Place of Production

④ Manufactured Date of issued label

[Appendix-2] Standard Testing Conditions

A2-1 Standard testing environment

Generally optical and electrical tests are performed in normal room temperature and humidity.

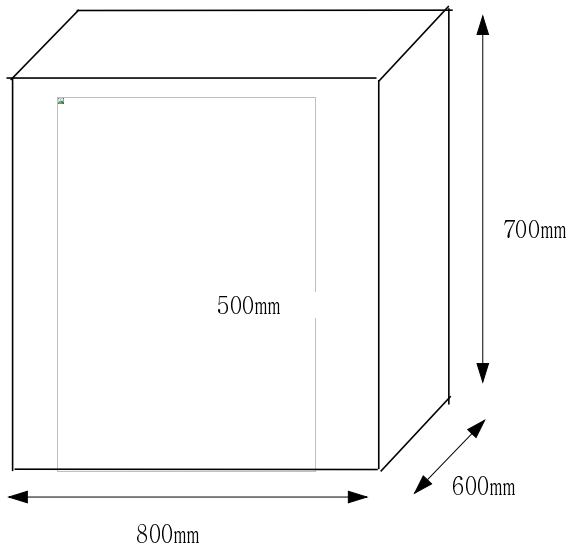
If the problem occurs, re-tests are performed in temperature 25±5℃ and 50±20% relative humidity.

A2-2 Standard testing method

☐ Operating Conditions: Standard Operating DC 350mA(Constant Current)

☐ Tester : CL 200(Konica Minolta)

☐ Location of measuring sensor : Measuring one point at center of LED module in vertically 0.5m height (dark room)



[Appendix-3] Precautions In Handling

1) LED Lighting for white light are devices which are materialized by combining white LEDs. The color of white light can differ a little unusually to diffuser plate(sign-board panel).

2) Handling
   - Don't drop the unit and don't give the unit any shocks.
   - Don't storage the Module in a dusty place or room.
   - Don't take the unit to pieces.

3) Cleaning
   - This LED Module should not be used in any type of fluid such as oil, organic solvent, etc.
   - It is recommended that IPA(Isopropyl Alcohol) be used as a solvent for cleaning the LED Module.
   - When using other solvents, it should be confirmed beforehand whether the solvents will dissolve the package and the resin or not. Freon solvents should not be used to clean the LEDs because of worldwide regulations. Do not clean the LED Module by the ultrasonic.
   - Before cleaning, a pre-test should be done to confirm whether any damage to the LED Lighting will occur.

4) Static Electricity
   - Static electricity or surge voltage damages the LED Lighting.

5) Others
   - If over voltage which exceeds the absolute maximum rating is applied to LED Lighting, it will cause damage Circuits(that LED is included) and result in destruction.
   - Do not directly look into lighted LED with naked eyes for long time.