SAMSUNG

Product Change Notice

Product : Samsung LH181B (SCPTF1HEL1******)**
Change : Manufacture site
Remark : Effective April, 2023
2022.Dec.21

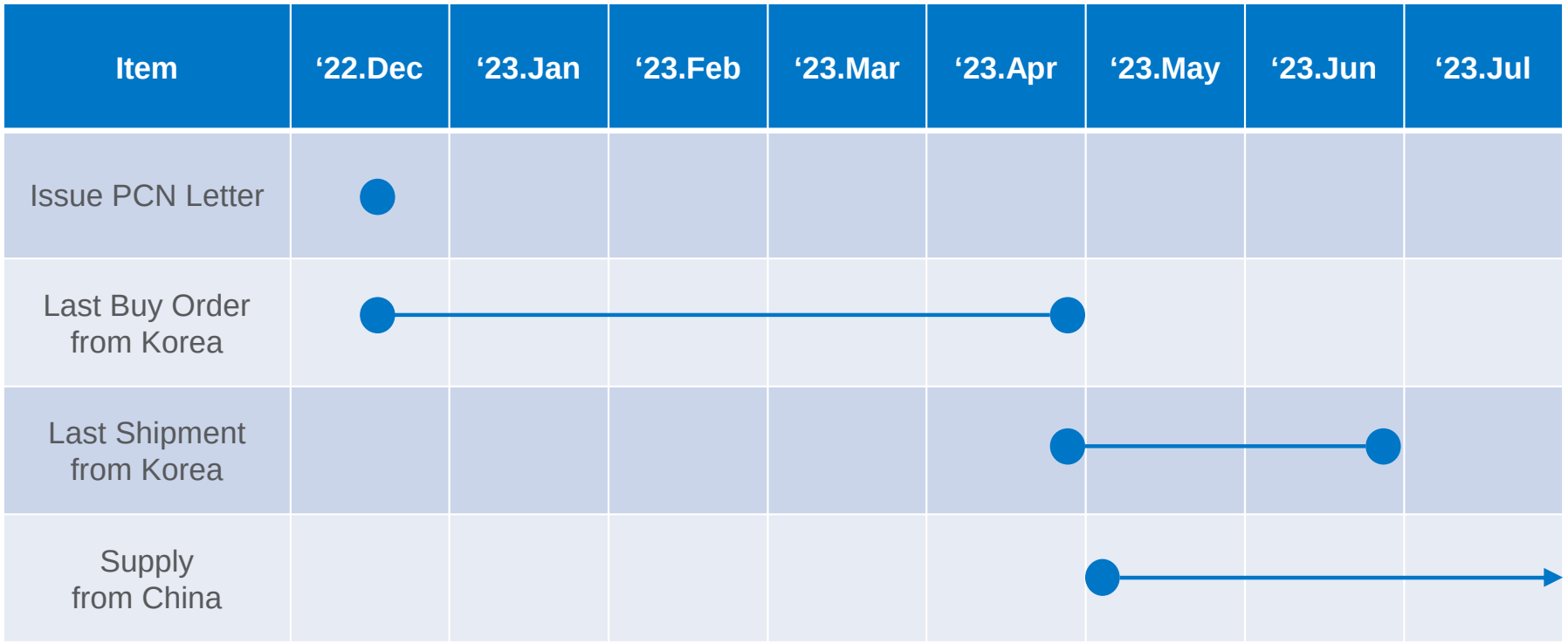
Summary

- **Change LH181B manufacture site from Korea to China**
  - **Purpose : Extend manufacture capacity**

Item		As-is	To-be
1. Material	0-1. Die	No Change	
	0-2. Package		
2. Design	1-1. Die	No Change	
	1-2. Package	Changed direction anode mark (※ See section 1)	
3. Electrical performance		No difference	
4. Thermal performance		Improvement	
5. Radiation diagram		Comparable	
6. Reliability		Passed	
7. Optical Characteristics		Comparable	
8. PKG Taping MOQ		2000pcs	4000pcs
9. Product Code (P/N)		S C P * * T F 1 H E L 1 * * * * * *	(Keep part number)

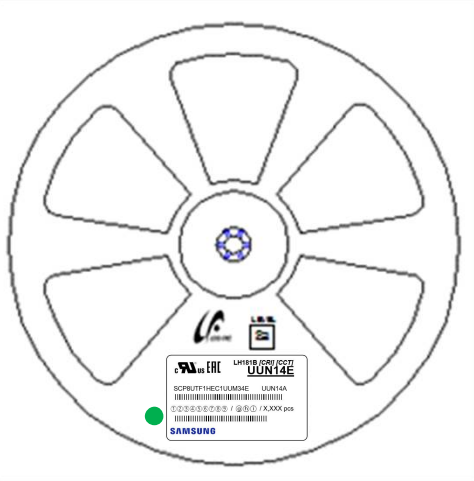
Plan

- **Schedule**



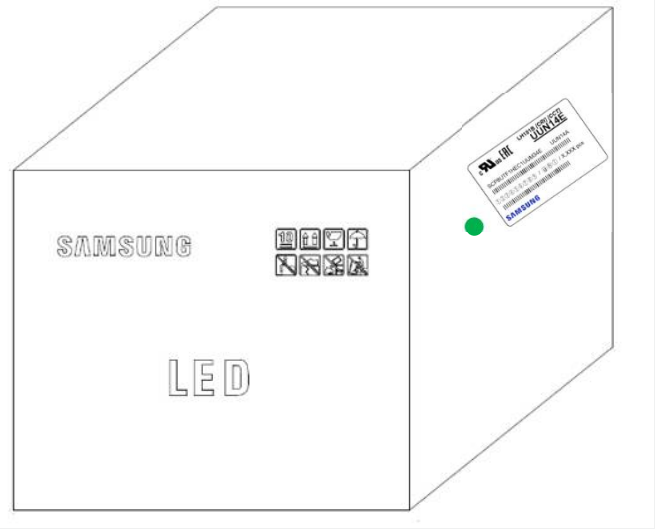
0. How to distinguish

- **China product apply green mark on reel, vinyl bag and box.**



[Reel]

[Aluminum vinyl bag]

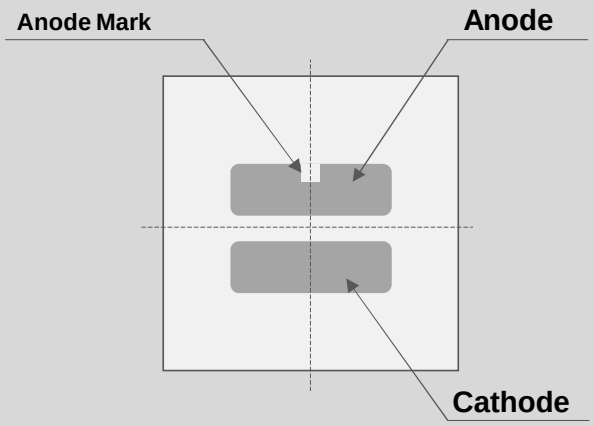
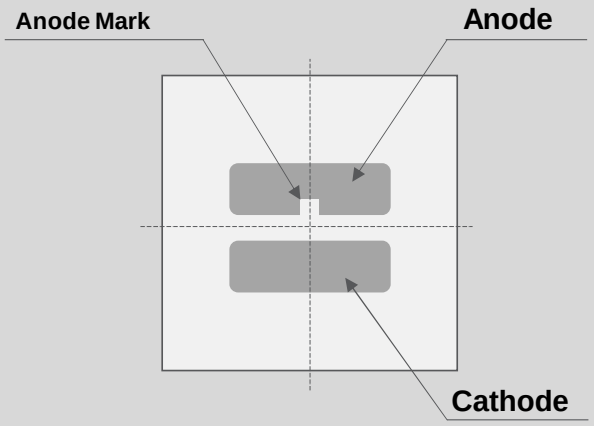


[Box]

※ Recommendation : Do not use old mixed with new products when assembling modules.

1. Change Anode Mark

- **Changed direction anode mark from outside to inside.**

	As-Is (Bottom view)	To-Be (Bottom view)
Drawing		

2. Exterior and Performance

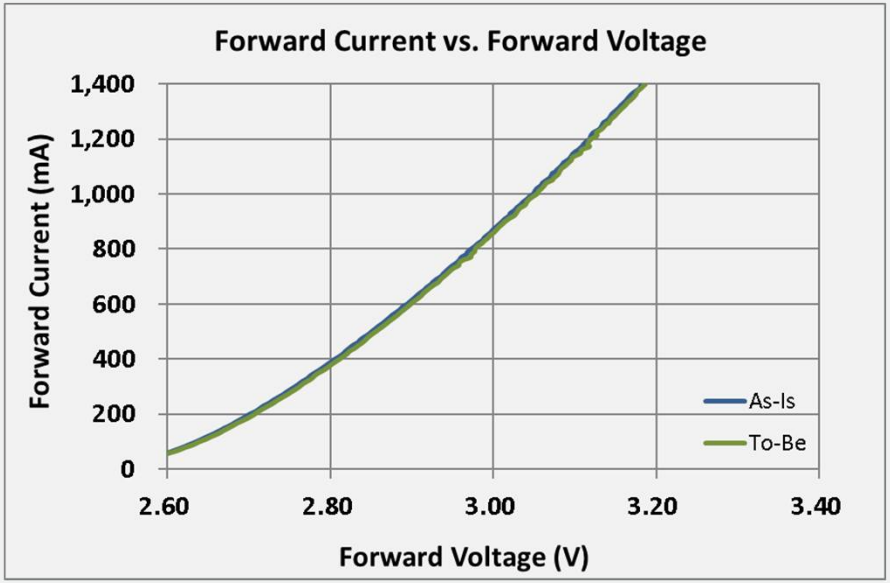
- **Slight improvement**

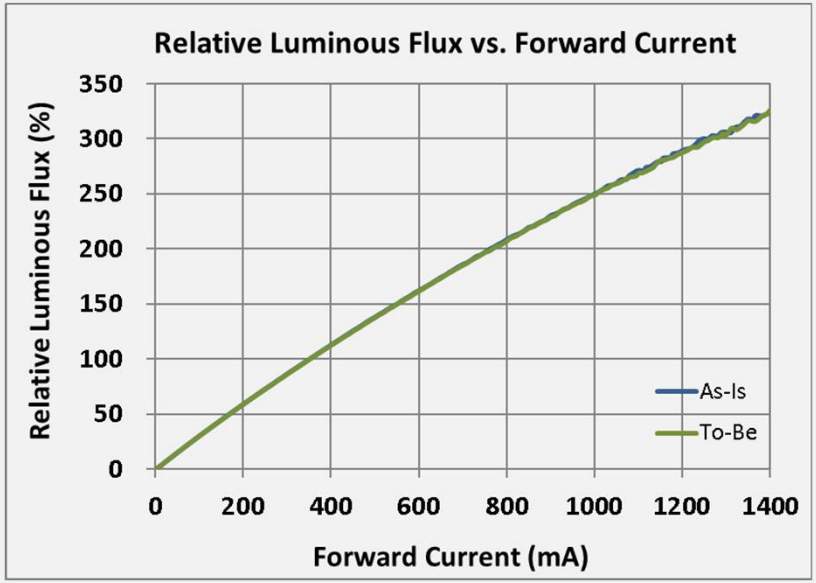
	As-Is	To-Be
Exterior		
Output Lumen (lm)	179.5	181.4
Vf (V)	2.77	2.78
Efficiency (lm/W)	185.1	186.4
CRI	73.2	73.3

※ CRI70 4000K @Sorting Condition

3. Comparison electrical sweep

- **No difference**

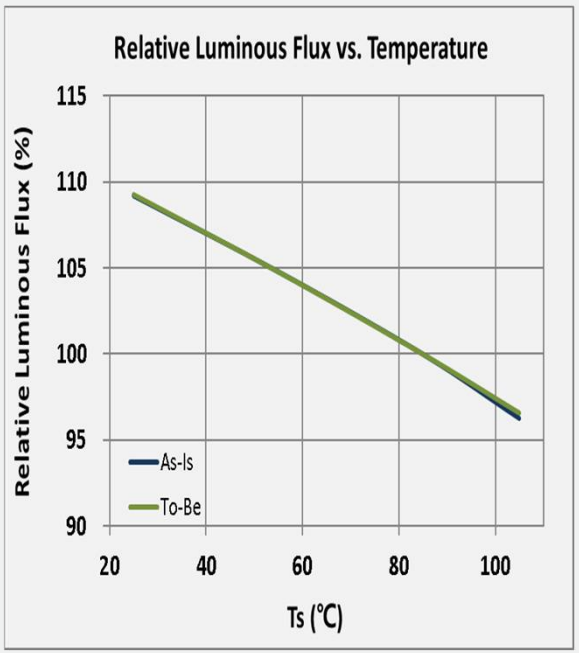


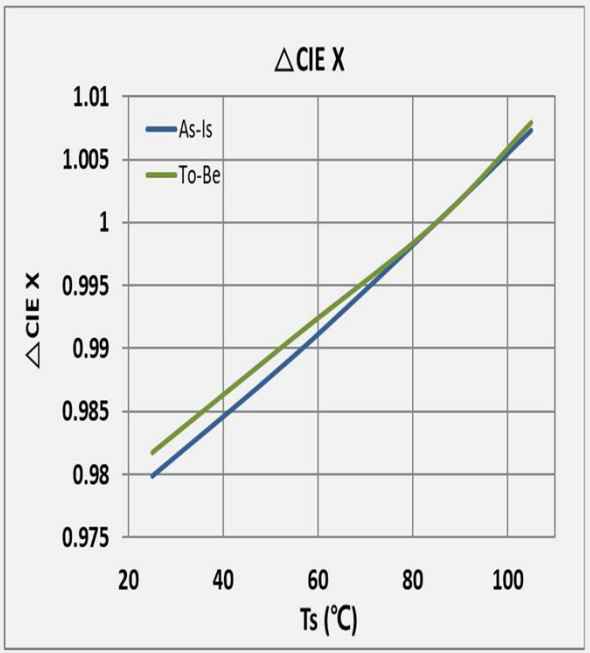


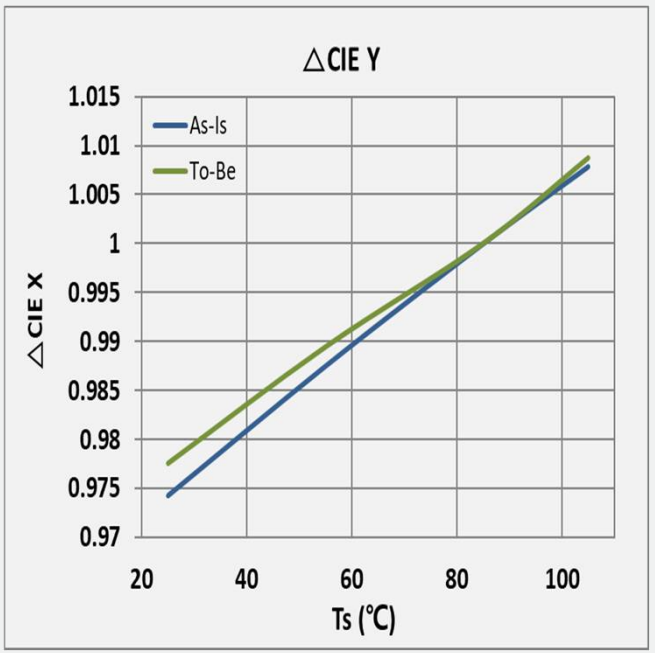
※ CRI70 4000K @Sorting Condition

4. Comparison thermal sweep

- **Improvement**



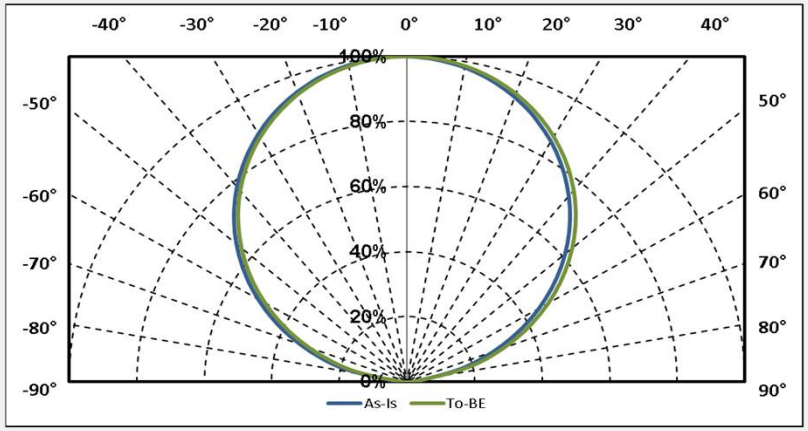


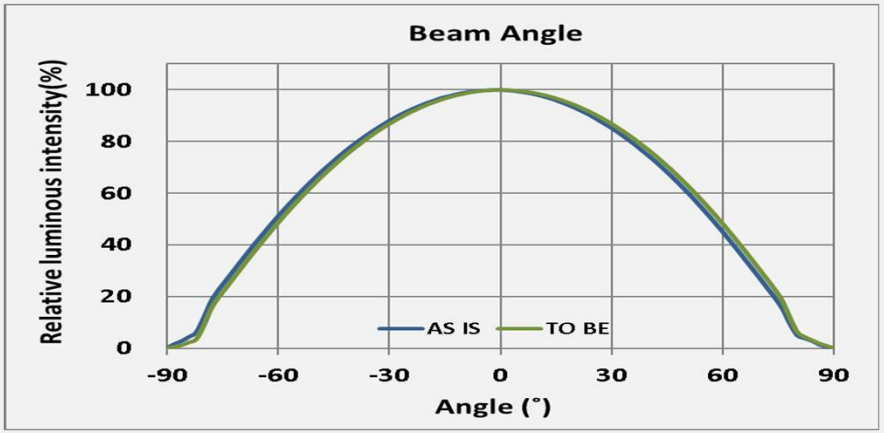


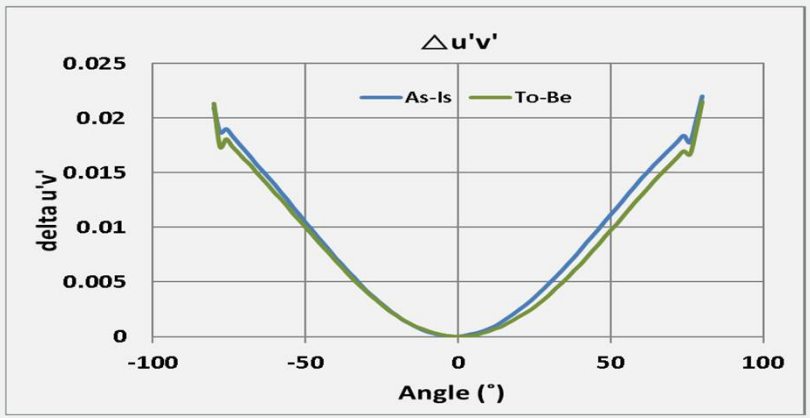
※ CRI70 4000K @Sorting condition

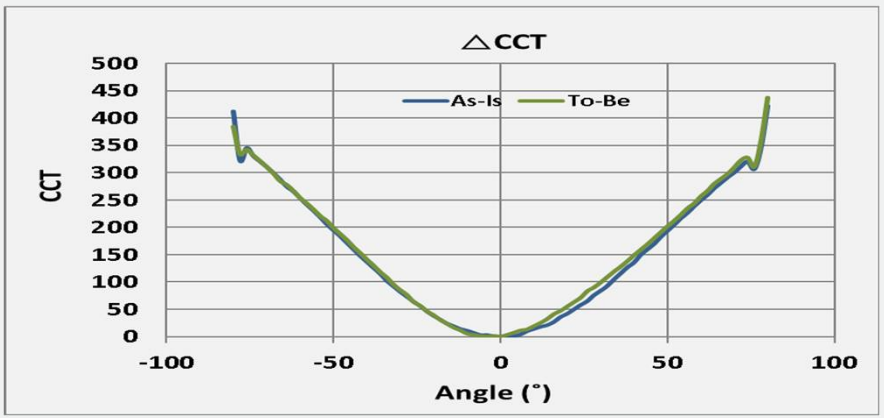
5. Comparison COA

- **Comparable**







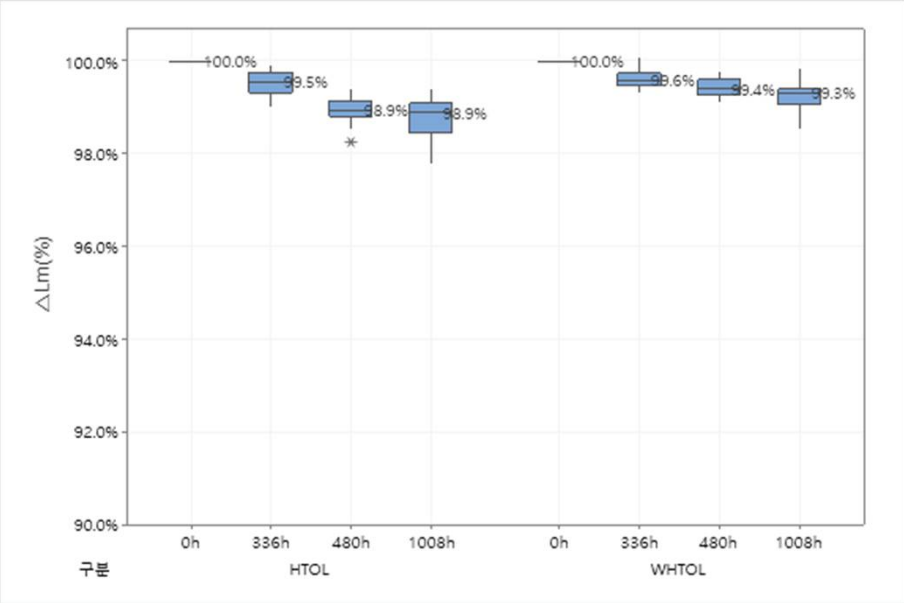


※ CRI70 4000K @Sorting condition

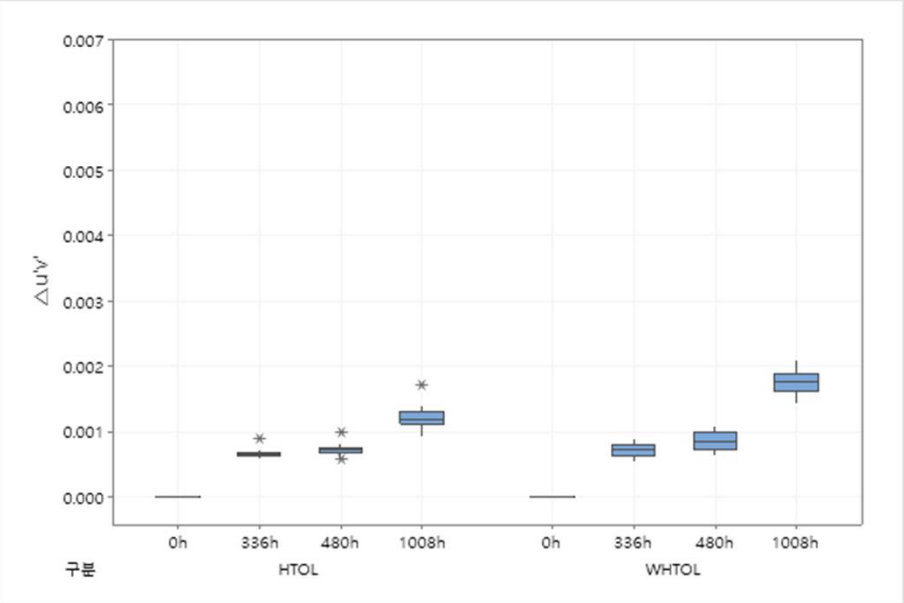
6. Reliability Test Results of new P/N

- Pass

△Im



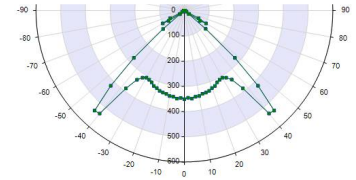
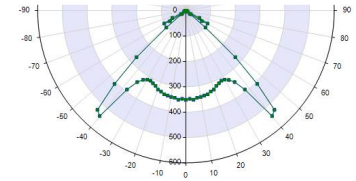
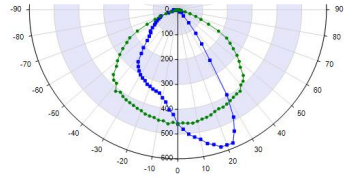
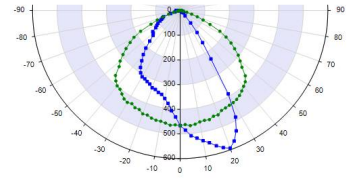
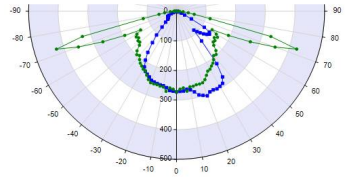
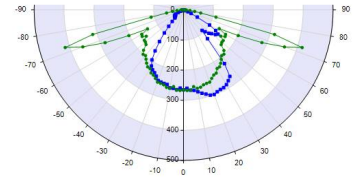
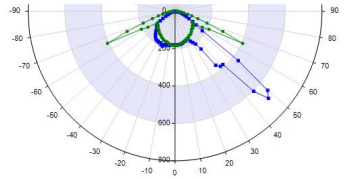
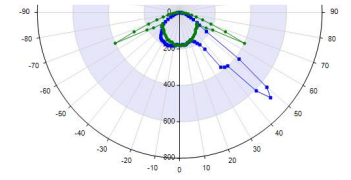
△u'v'



Test	HTOL (85℃) (1008hr)			WHTOL (85℃/85%RH) (1008hr)			T/C (-45~125℃, Each 15min)
	△VF	△Im	△u'v'	△VF	△Im	△u'v'	
Result	100.0%	98.9%	0.0012	100.0%	99.3%	0.0017	700cyc Pass

7. 2nd Optic

- **No different distribution curve of luminous intensity**

*Lens P/N	C15932_STRADA-2X2CSP		C15967_STRADA-2X2CSP		C16119_STRADA-2X2CSP		C16134_STRADA-2X2CSP	
Contents	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be	As-Is	To-Be
Lumen flux	973.3 lm	973.5 lm	920.0 lm	920.6 lm	879.5 lm	880.0 lm	941.1 lm	941.1 lm
Peak intensity	596.41 cd/klm	606.80 cd/klm	590.00 cd/klm	594.93 cd/klm	758.28 cd/klm	763.53 cd/klm	1234.45 cd/klm	1218.03 cd/klm
Transmittance	97.3 %	97.3%	92.0 %	92.1 %	87.9 %	88.0 %	94.1 %	94.1 %
Beam type	Type VS Very short	Type VS Very short	Type I Very short	Type I Very short	Type II Medium	Type II Medium	Type II Short	Type II Short
Beam distribution	As-Is  To-Be 		As-Is  To-Be 		As-Is  To-Be 		As-Is  To-Be 	

※ CRI70 4000K

** Several part of LEDiL lens had been used for analysis on compatibility (https://www.ledil.com/)*

7-1. appendix) Rayfile

- **Available simulate 2nd optic by using the below link**

Model	Type	Rayfile
LH181B_CM	TracePro	https://cdn.samsung.com/led/file/resource/2022/04/220413_181B_h1_5000000Rays_TraceProBinary.ray
	ZEMAX	https://cdn.samsung.com/led/file/resource/2022/04/220413_181B_h1_5000000Rays_ZEMAX.sdf
	FRED	https://cdn.samsung.com/led/file/resource/2022/04/220413_181B_h1_5000000Rays_FRED.ray
	LightTools	https://cdn.samsung.com/led/file/resource/2022/04/220413_181B_h1_5000000Rays_LightToolsBinary.ray
	OPTIS	https://cdn.samsung.com/led/file/resource/2022/04/220413_181B_h1_5000000Rays_OPTIS.ray

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Thank you

Form Factor	Product Gr.	Product Group (detail)	CRI	CIE	Flux	VF	CCT	Order code (원가구분)
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	K3	2.7~3.1	2200	SCP7YTF1HEL1YKK34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	M3	2.7~3.1	2700	SCP7WTF1HEL1WKM34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	N3	2.7~3.1	3000	SCP7VTF1HEL1VKN34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	P3	2.7~3.1	3500	SCP7UTF1HEL1UKP34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	P3	2.7~3.1	4000	SCP7TTF1HEL1TKP34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	P3	2.7~3.1	5000	SCP7RTF1HEL1RKP34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	P3	2.7~3.1	5700	SCP7QTF1HEL1QKP34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	N3	2.7~3.1	6500	SCP7PTF1HEL1PKN34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	P2	2.7~3.1	3000	SCP7VTF1HEL1VKP24E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	Q2	2.7~3.1	4000	SCP7TTF1HEL1TKQ24E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	Q2	2.7~3.1	5000	SCP7RTF1HEL1RKQ24E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	Q2	2.7~3.1	5700	SCP7QTF1HEL1QKQ24E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	P3	2.7~3.1	6500	SCP7PTF1HEL1PKP34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	R2	2.7~3.1	4000	SCP7TTF1HEL1TKR24E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	P2	2.7~2.9	3000	SCP7VTF1HEL1VKP26A
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	Q2	2.7~2.9	4000	SCP7TTF1HEL1TKQ26A
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	Q2	2.7~2.9	5000	SCP7RTF1HEL1RKQ26A
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	P2	2.7~2.9	3000	SCP7VTF1HEL1VKP24A
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	Q2	2.7~2.9	4000	SCP7TTF1HEL1TKQ24A
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	Q2	2.7~2.9	5000	SCP7RTF1HEL1RKQ24A
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	Q2	2.7~2.9	5700	SCP7QTF1HEL1QKQ24A
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	N2	2.7~2.9	2700	SCP7WTF1HEL1WKN24A
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	M2	2.7~2.9	2200	SCP7YTF1HEL1YKM24A
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	N2	2.7~2.8	2700	SCP7WTF1HEL1WKN248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	P2	2.7~2.8	3000	SCP7VTF1HEL1VKP248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	P2	2.7~2.8	3500	SCP7VTF1HEL1UKP248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	Q2	2.7~2.8	4000	SCP7TTF1HEL1TKQ248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	Q2	2.7~2.8	5000	SCP7RTF1HEL1RKQ248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	Q2	2.7~2.8	5700	SCP7QTF1HEL1QKQ248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	5SDCM	P2	2.7~2.8	5700	SCP7QTF1HEL1QKQ248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	3SDCM	M3	2.7~2.8	2200	SCP7YTF1HEL1YUM34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	3SDCM	M3	2.7~3.1	2700	SCP7WTF1HEL1WUM34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	3SDCM	N3	2.7~3.1	3000	SCP7VTF1HEL1VUN34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	3SDCM	P3	2.7~3.1	3500	SCP7UTF1HEL1UUP34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	3SDCM	P3	2.7~3.1	4000	SCP7TTF1HEL1TUP34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	3SDCM	P3	2.7~3.1	5000	SCP7RTF1HEL1RUP34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	3SDCM	P3	2.7~3.1	5700	SCP7QTF1HEL1QUP34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	3SDCM	N3	2.7~3.1	6500	SCP7PTF1HEL1PUN34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	3SDCM	M2	2.7~2.8	2200	SCP7YTF1HEL1YUM248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	3SDCM	N2	2.7~2.8	2700	SCP7WTF1HEL1WUN248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	3SDCM	P2	2.7~2.8	3000	SCP7VTF1HEL1VUP248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	3SDCM	P2	2.7~2.8	3500	SCP7UTF1HEL1UUP248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	3SDCM	Q2	2.7~2.8	4000	SCP7TTF1HEL1TUQ248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	3SDCM	Q2	2.7~2.8	5000	SCP7RTF1HEL1RUQ248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	3SDCM	Q2	2.7~2.8	5700	SCP7QTF1HEL1QUQ248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	70	3SDCM	P2	2.7~2.8	6500	SCP7PTF1HEL1PUP248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80	5SDCM	H3	2.7~3.1	2200	SCP8YTF1HEL1YKH34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80	5SDCM	K3	2.7~3.1	2700	SCP8WTF1HEL1WKK34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80	5SDCM	M3	2.7~3.1	3000	SCP8VTF1HEL1VKM34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80	5SDCM	N3	2.7~3.1	3500	SCP8UTF1HEL1UKN34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80	5SDCM	N3	2.7~3.1	4000	SCP8TTF1HEL1TKN34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80	5SDCM	N3	2.7~3.1	5000	SCP8RTF1HEL1RKN34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80	5SDCM	N3	2.7~3.1	5700	SCP8QTF1HEL1QKN34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80	5SDCM	M3	2.7~3.1	6500	SCP8PTF1HEL1PKM34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80	5SDCM	M2	2.7~3.1	3000	SCP8VTF1HEL1VKM24E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80	5SDCM	N2	2.7~3.1	4000	SCP8TTF1HEL1TKN24E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80	5SDCM	P2	2.7~3.1	5700	SCP8QTF1HEL1QKP24E

HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 5SDCM	H3	2.7~2.9	2200	SCP8YTF1HEL1YKH36A
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 5SDCM	H3	2.7~2.9	2200	SCP8YTF1HEL1YKH34A
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 5SDCM	K3	2.7~2.9	2700	SCP8WTF1HEL1WKK34A
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 5SDCM	N2	2.7~2.9	4000	SCP8TTF1HEL1TKN24A
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 5SDCM	N2	2.7~2.9	3000	SCP8VTF1HEL1VKN24A
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 5SDCM	M2	2.7~2.8	2700	SCP8WTF1HEL1WKM248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 5SDCM	N2	2.7~2.8	3000	SCP8VTF1HEL1VKN248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 5SDCM	N2	2.7~2.8	3500	SCP8VTF1HEL1UKN248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 5SDCM	P2	2.7~2.8	4000	SCP8TTF1HEL1TKP248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 5SDCM	P2	2.7~2.8	5000	SCP8RTF1HEL1RKP248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 5SDCM	N2	2.7~2.8	5700	SCP8QTF1HEL1QKN248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 5SDCM	N2	2.7~2.8	6500	SCP8PTF1HEL1PKN248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 5SDCM	P2	2.7~2.8	5700	SCP8QTF1HEL1QKP248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	H3	2.7~3.1	2200	SCP8YTF1HEL1YUH34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	K3	2.7~3.1	2700	SCP8WTF1HEL1WUK34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	M3	2.7~3.1	3000	SCP8VTF1HEL1VUM34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	M2	2.7~2.8	3000	SCP8VTF1HEL1VUM24E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	N3	2.7~3.1	3500	SCP8UTF1HEL1UUN34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	N3	2.7~3.1	4000	SCP8TTF1HEL1TUN34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	N3	2.7~3.1	5000	SCP8RTF1HEL1RUN34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	N3	2.7~3.1	5700	SCP8QTF1HEL1QUN34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	M3	2.7~3.1	6500	SCP8PTF1HEL1PUM34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	N2	2.7~3.1	5000	SCP8RTF1HEL1RUN24E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	N2	2.7~3.1	4000	SCP8TTF1HEL1TUN24E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	M2	2.7~2.8	2700	SCP8WTF1HEL1WUM248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	N2	2.7~2.8	3000	SCP8VTF1HEL1VUN248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	N2	2.7~2.8	3500	SCP8VTF1HEL1UUN248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	P2	2.7~2.8	4000	SCP8TTF1HEL1TUP248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	P2	2.7~2.8	5000	SCP8RTF1HEL1RUP248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	N2	2.7~2.8	5700	SCP8QTF1HEL1QUN248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	80 3SDCM	N2	2.7~2.8	6500	SCP8PTF1HEL1PUN248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	90 5SDCM	G3	2.7~3.1	2700	SCP9WTF1HEL1WKG34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	90 5SDCM	H3	2.7~3.1	3000	SCP9VTF1HEL1VKH34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	90 5SDCM	H3	2.7~3.1	3500	SCP9UTF1HEL1UKH34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	90 5SDCM	H3	2.7~3.1	4000	SCP9TTF1HEL1TKH34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	90 5SDCM	H3	2.7~3.1	5000	SCP9RTF1HEL1RKH34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	90 5SDCM	H2	2.7~2.8	2700	SCP9WTF1HEL1WKH248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	90 5SDCM	J2	2.7~2.8	3000	SCP9VTF1HEL1VKJ248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	90 5SDCM	J2	2.7~2.8	3500	SCP9UTF1HEL1UKJ248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	90 5SDCM	J2	2.7~2.8	4000	SCP9TTF1HEL1TKJ248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	90 5SDCM	K2	2.7~2.8	5000	SCP9RTF1HEL1RKK248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	90 5SDCM	K2	2.7~2.8	5700	SCP9QTF1HEL1QKK248
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	90 3SDCM	G3	2.7~3.1	2700	SCP9WTF1HEL1WUG34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	90 3SDCM	H3	2.7~3.1	3000	SCP9VTF1HEL1VUH34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	90 3SDCM	H3	2.7~3.1	3500	SCP9UTF1HEL1UUH34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	90 3SDCM	H3	2.7~3.1	4000	SCP9TTF1HEL1TUH34E
HPL CSP	LH181B	LH181B (3W) 2.36×2.36	90 3SDCM	H3	2.7~3.1	5000	SCP9RTF1HEL1RUH34E