

**Inolux Flat Super Flux LED Lamp
HT-PR120XXX Series**

Official Product	HT-PR120XXX series	Customer Part No.		Data Sheet No.
	*****	*****		HT-PR120XXX series
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		June 27, 2013	Version of 1.0	Page 1/12

DISCLAIMER

INOLUX reserves the right to make changes without further notice to any products herein to improve reliability, function or design. INOLUX does not assume any liability arising out of the application or use of any product or circuit described herein; neither does it convey any license under its patent rights, nor the rights of others.

LIFE SUPPORT POLICY

INOLUX's products are not authorized for use as critical components in life support devices or systems without the express written approval of the President of INOLUX or INOLUX INTERNATIONAL. As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and (c) whose failure to perform when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury of the user.

2. A critical component in any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.

Official Product	HT-PR120XXX series	Customer Part No.		Data Sheet No.
	*****	*****		HT-PR120XXX series
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		June 27, 2013	Version of 1.0	Page 2/12

Orderable Information

H T - P R 1 2 0 X X X -Y Y Y Y

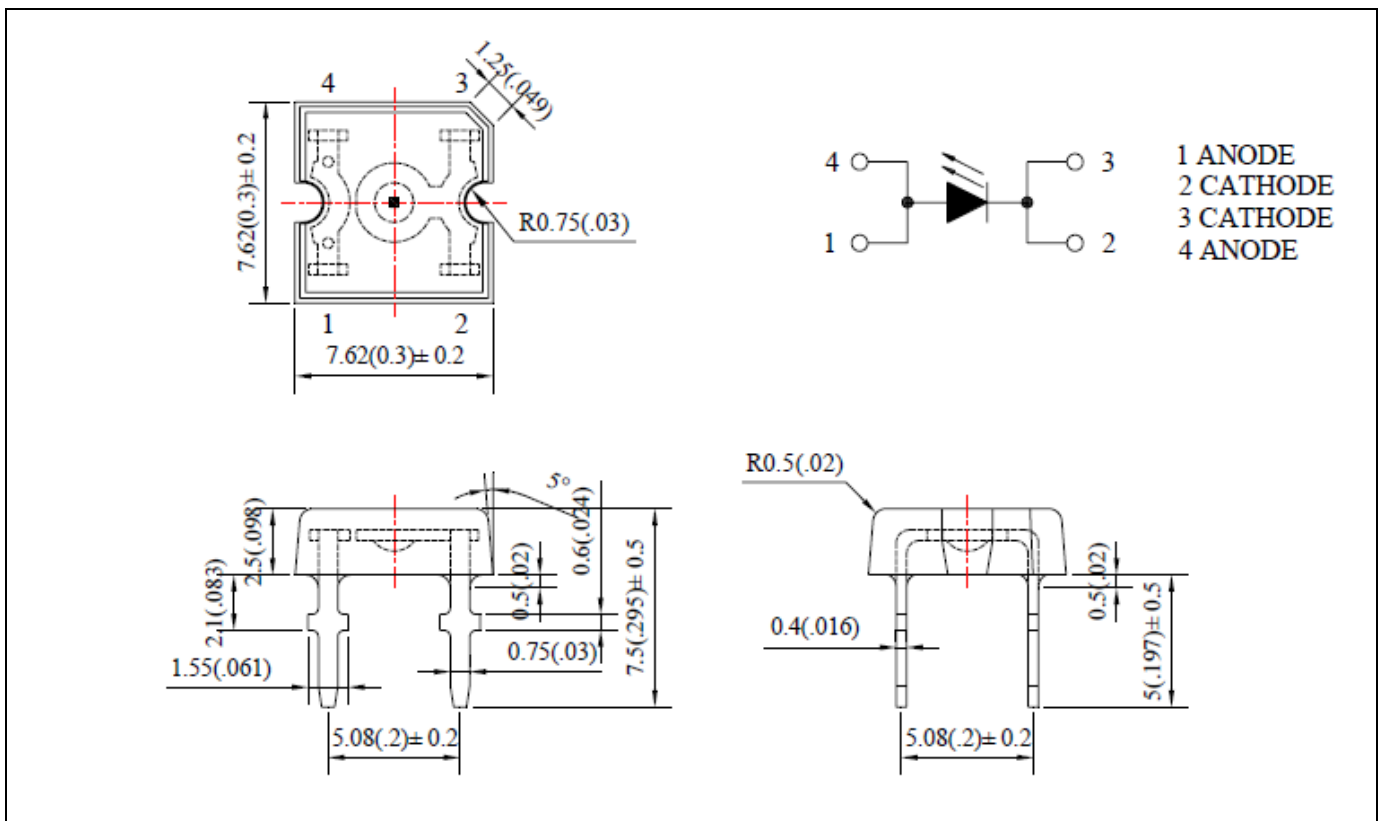


Series Name	Viewing Angle	Color Code	Customer Code
HT-PR= Inolux Super Flux LED Lamp	120= 120 Deg	UR = 624nm AlInGaP Red UBG = 505nm InGaN Bluish Green UTG = 525nm InGaN True Green UY = 590nm AlInGaP Yellow UA = 605nm AlInGaP Amber UB = 470nm InGaN Blue TW = InGaN White	YYYY = Customer code

Official Product	HT-PR120XXX series	Customer Part No.		Data Sheet No.
	*****	*****		HT-PR120XXX series
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		June 27, 2013	Version of 1.0	Page 3/12

Features:

- Low Profile, Stable Color
- 4 leads with Flat Top
- Water clear lens
- InGaN and AlInGaP technology
- Solid state reliability
- Special packaging available upon request



-All Dimensions are in millimeters

-Tolerance = +/- 0.25mm

Official Product	HT-PR120XXX series	Customer Part No.	Data Sheet No.
	*****	*****	HT-PR120XXX series
Specifications are subject to change without notice. Data and drawings herein are copyrighted.	June 27, 2013	Version of 1.0	Page 4/12

Absolute Maximum Ratings at Ta=25C

Parameter	Symbol	AlInGaP Material	InGaN Material	Unit
Power Dissipation	P _d	182	190	mW
Reverse Voltage	V _r	5	5	V
Forward Current	I _F	70	50	mA
Reverse Current	I _r	10	10	μA
Peak Current (1/10 Duty Cycle, 0.1ms pulse width)	I _F (Peak)	100	100	mA
Operating Temperature Range	T _{opr}	-40 to +80		° C
Storage Temperature Range	T _{stg}	-40 to +100		° C
Lead Soldering Temp	T _{sol}	260		° C

Official Product	HT-PR120XXX series	Customer Part No.		Data Sheet No.
	*****	*****		HT-PR120XXX series
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		June 27, 2013	Version of 1.0	Page 5/12

Electrical and Optical Characteristic (@ 25 degree C)

Parameter	UR	UBG	UTG	UY	Test Condition
Luminous Intensity:					
Min (mcd)	160	350	350	160	If=20mA
Typ (mcd)	300	680	680	300	If=20mA
Forward voltage (Vf)					
Typ	2.2	3.3	3.3	2.2	If=20mA
Max	2.6	3.8	3.8	2.6	If=20mA
Dominant Wavelength (nm)	624	505	525	590	If=20mA
Viewing angle	130	120	120	130	If=20mA

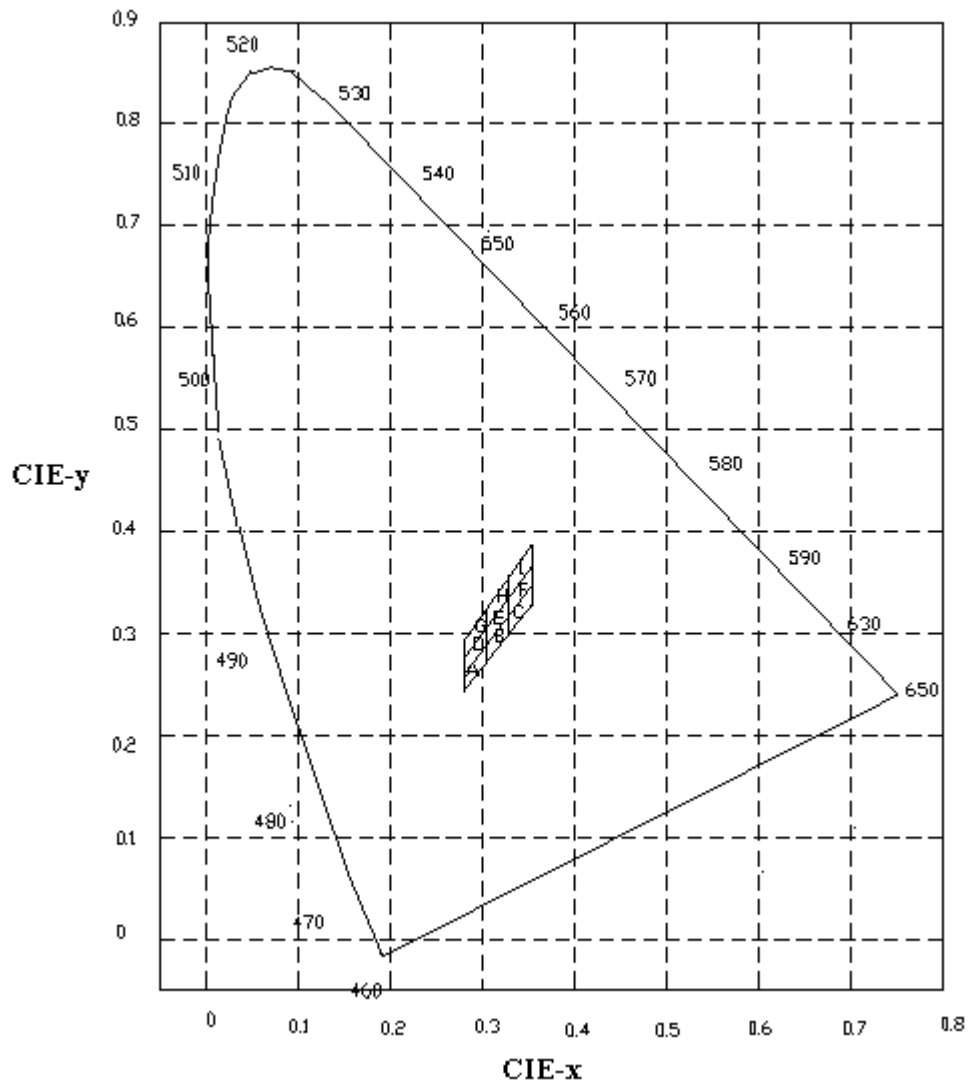
- Brightness tolerance = +/- 10%

Parameter	UA	UB	TW	Test Condition
Luminous Intensity:				
Min (mcd)	120	90	450	If=20mA
Typ (mcd)	190	180	730	If=20mA
Forward voltage (Vf)				
Typ	2.2	3.3	3.3	If=20mA
Max	2.6	3.8	3.8	If=20mA
Dominant Wavelength (nm)	605	470	X=0.30 Y=0.31	If=20mA
Viewing angle	130	120	130	If=20mA

- Brightness tolerance = +/- 10%

Official Product	HT-PR120XXX series	Customer Part No.		Data Sheet No.
	*****	*****		HT-PR120XXX series
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		June 27, 2013	Version of 1.0	Page 6/12

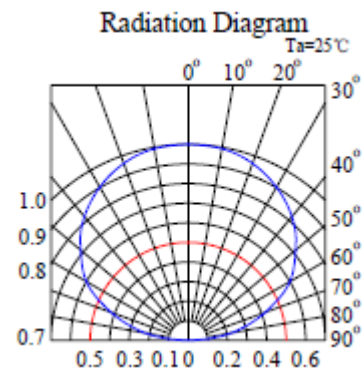
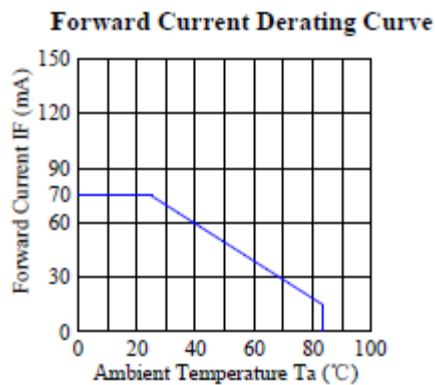
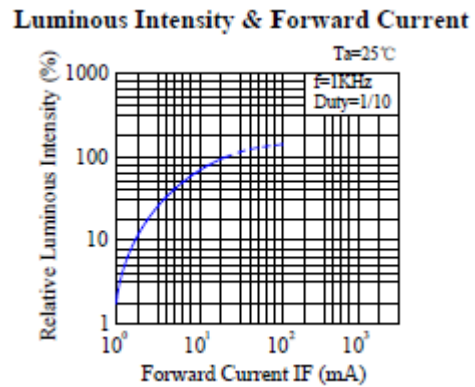
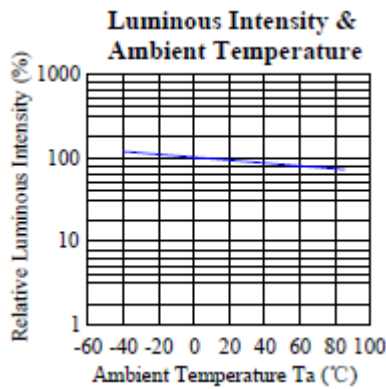
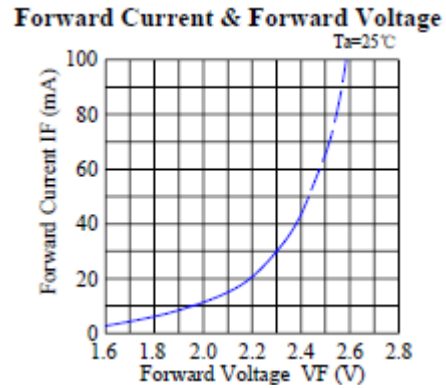
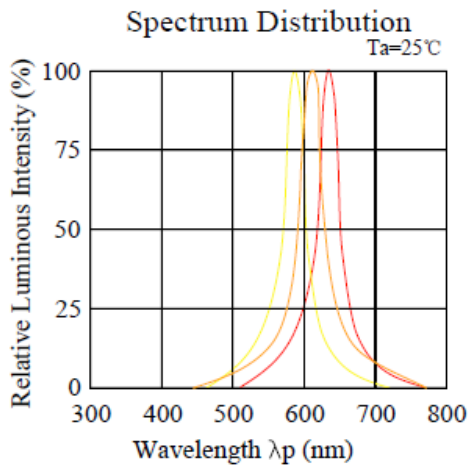
Chromaticity Diagram



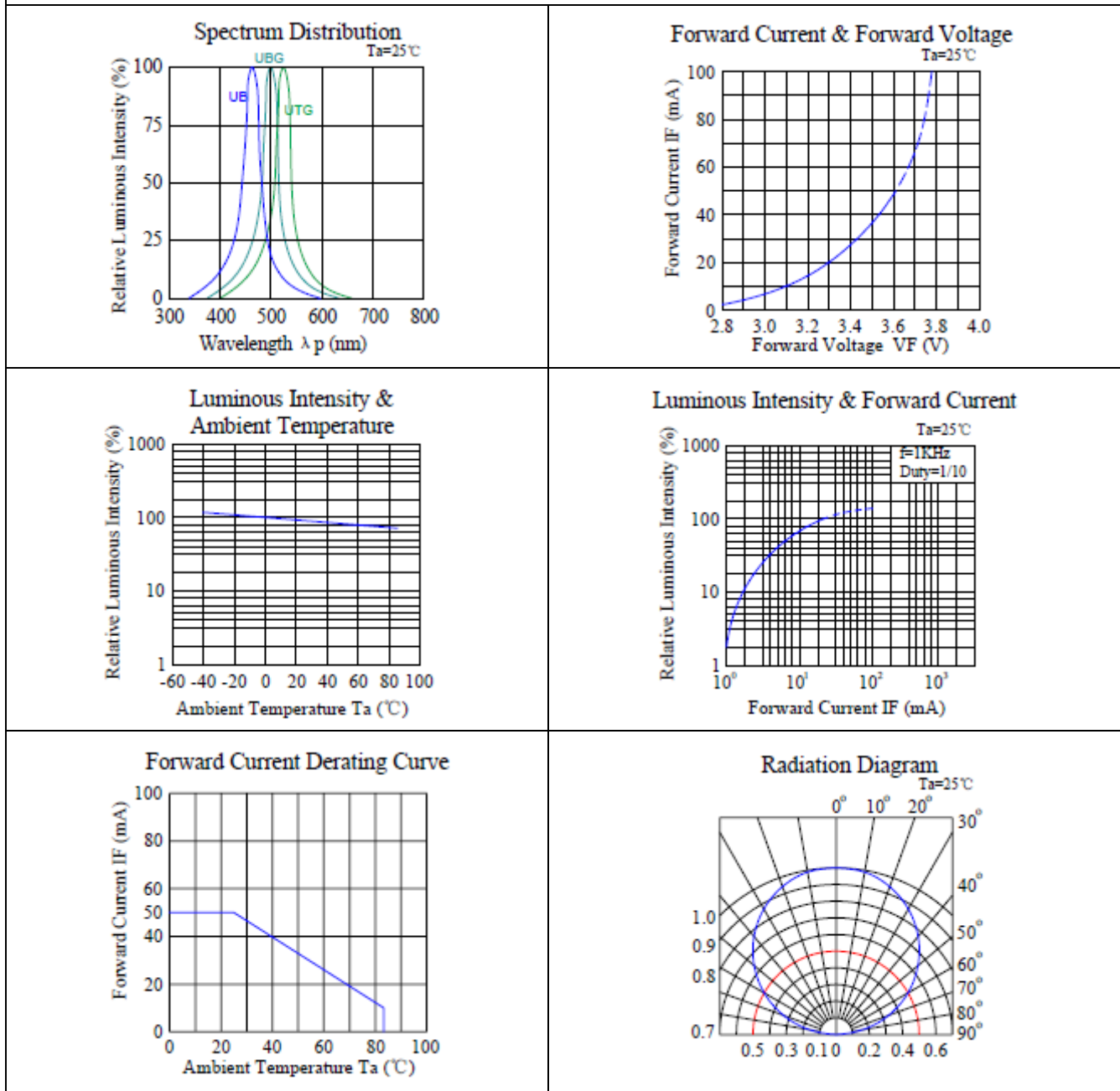
Official Product	HT-PR120XXX series	Customer Part No.		Data Sheet No.
	*****	*****		HT-PR120XXX series
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		June 27, 2013	Version of 1.0	Page 7/12

Group	Chromaticity Coordinate Group				
	A	X	0.27	0.27	0.297
Y		0.24	0.257	0.287	0.27
B	X	0.297	0.297	0.323	0.323
	Y	0.27	0.287	0.317	0.3
C	X	0.323	0.323	0.35	0.35
	Y	0.3	0.317	0.347	0.33
D	X	0.27	0.27	0.297	0.297
	Y	0.257	0.273	0.303	0.287
E	X	0.297	0.297	0.323	0.323
	Y	0.287	0.303	0.333	0.317
F	X	0.323	0.323	0.35	0.35
	Y	0.317	0.333	0.363	0.347
G	X	0.27	0.27	0.297	0.297
	Y	0.273	0.29	0.32	0.303
H	X	0.297	0.297	0.323	0.323
	Y	0.303	0.32	0.35	0.333
I	X	0.323	0.323	0.35	0.35
	Y	0.333	0.35	0.38	0.363

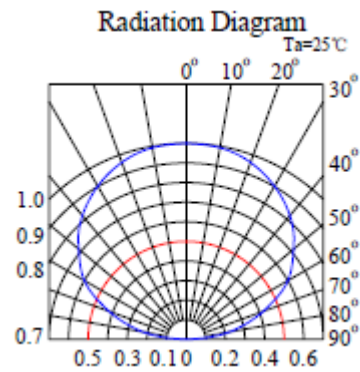
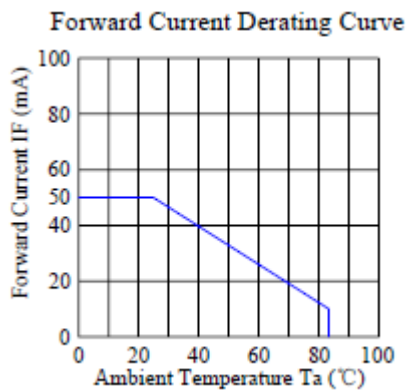
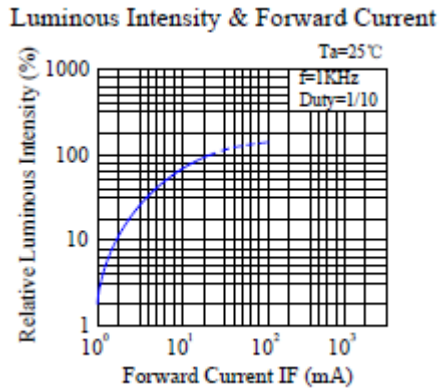
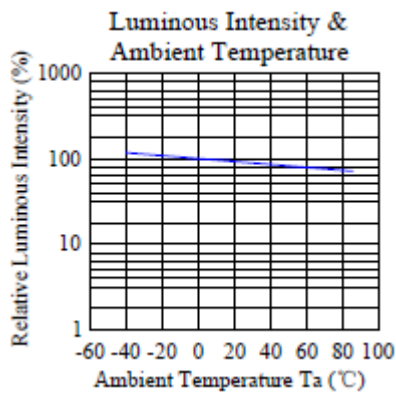
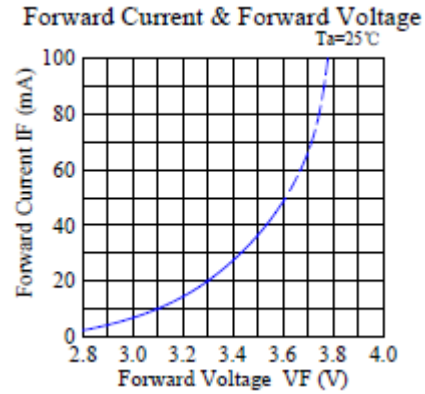
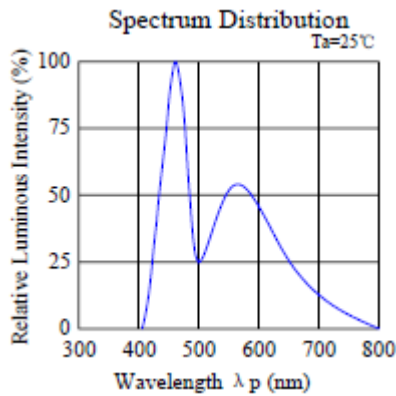
Official Product	HT-PR120XXX series	Customer Part No.		Data Sheet No.
	*****	*****		HT-PR120XXX series
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		June 27, 2013	Version of 1.0	Page 8/12

Characteristic Curves for UR, UA and UY


Official Product	HT-PR120XXX series	Customer Part No.	Data Sheet No.
	*****	*****	HT-PR120XXX series
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		June 27, 2013	Version of 1.0
			Page 9/12

Characteristic Curves for UB, UBG and UTG


Official Product	HT-PR120XXX series	Customer Part No.	Data Sheet No.
	*****	*****	HT-PR120XXX series
Specifications are subject to change without notice. Data and drawings herein are copyrighted.		June 27, 2013	Version of 1.0
			Page 10/12

Characteristic Curves for White


Official Product	HT-PR120XXX series	Customer Part No.	Data Sheet No.
	*****	*****	HT-PR120XXX series
Specifications are subject to change without notice. Data and drawings herein are copyrighted.	June 27, 2013	Version of 1.0	Page 11/12



Revision History

Changes since last revision	Page	Version No.	Revision Date
Initial release for 120 Deg Super Flux		1.0	06-27-2013

Official Product	HT-PR120XXX series	Customer Part No.	Data Sheet No.
	*****	*****	HT-PR120XXX series
Specifications are subject to change without notice. Data and drawings herein are copyrighted.	June 27, 2013	Version of 1.0	Page 12/12