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## LED Module

# LT-F562A\_G2



### Features & Benefits

- Excellent for High Bay, Low Bay and High Mount Fixtures
- Metal Core PCB for maximum heat dissipation
- Simple mounting – Screw mounted on module edges
- Continuous LED spacing for even lumen distribution
- Input and Output Poke-In connectors for easy wiring
- End to End mounting for long linear applications
- Full Certifications

### Applications

#### Indoor Lighting:

- High Bay / Low Bay / High Mount Fixtures

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## 1. Product Code Information

### F562A\_G2

Nominal CCT (K)	Product Code
3000	SI-B8V342560WW
3500	SI-B8U342560WW
4000	SI-B8T342560WW
5000	SI-B8R342560WW

## 2. Characteristics

Item	Rating	Unit	Remark
Rated Lifetime	>50,000	hour	L70B50
Ingress Protection (IP)	no rating	-	
Ambient / Operating Temperature ( $t_{amb}$ )	-20 ~ +50	°C	
Storage Temperature	-30 ~ +80	°C	

### F562A\_G2

Item	Nom. CCT (K)	Rating			Unit	Remark
		Min	Typ.	Max		
Luminous Flux ( $\Phi_v$ )	3000	4145	4605	5120	lm	$I_f = 1350 \text{ mA}$ $t_p = 50 \text{ }^\circ\text{C}$
	3500	4210	4680	5200		
	4000	4340	4820	5355		
	5000	4340	4820	5355		
Luminous Efficacy	3000	124	138	153	lm/W	
	3500	126	140	155		
	4000	130	144	160		
	5000	130	144	160		
CCT	3000	2917	3033	3159	K	
	3500	3298	3445	3610		
	4000	3768	3960	4174		
	5000	4773	5012	5283		
Color Consistency (initial)		-	4	-	Mac Adam step	
Color Rendering Index (Ra)		80	83	-	-	
Operating Current ( $I_f$ )		-	1350	1620	mA	-
Operating Voltage ( $V_f$ )		23.56	24.8	26.04	Vdc	$I_f = 1350 \text{ mA}$ $t_p = 50 \text{ }^\circ\text{C}$
Power Consumption		31.8	33.5	35.2	W	

#### Notes:

- 1)  $t_p$ : temperature at which performance is specified; measured at “tc point”.
- 2) Samsung maintains a measurement tolerance of: Luminous flux:  $\pm 7\%$ , CRI:  $\pm 3.0$ , Voltage:  $\pm 0.3\text{V}$ , Power Consumption:  $\pm 0.3\text{W}$

Item	Nominal*	Life**	Max***	Unit
Temperature	50 ( $t_p$ )	80( $t_{p,50}$ )	90( $t_c$ )	°C

**Notes:**

- \* Temperature used to specify performance of the module ( $t_p$ ).
- \*\* Rated maximum performance temperature at which lifetime is specified ( $t_{p,50}$ ).
- \*\*\* Rated maximum temperature, highest permissible temperature to avoid safety risk ( $t_c$ ).

All temperatures are measured at the designated “tc point” as indicated on the module.

### 3. Structure and Assembly

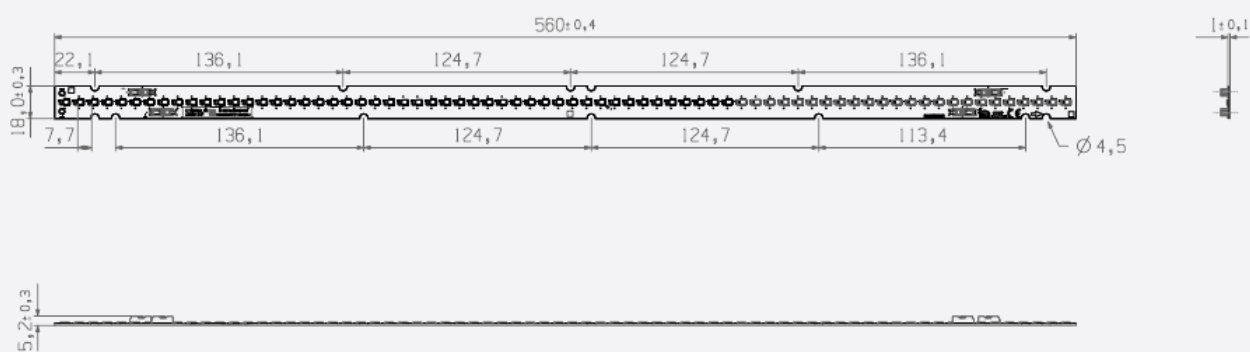
#### a) Appearance



#### b) Dimension

##### F562A\_G2

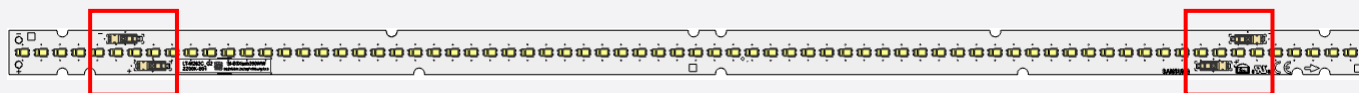
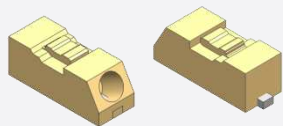
Dimension	Specification	Tolerance	Unit
Module Length	560.0	$\pm 0.4$	mm
Module Width	18.0	$\pm 0.3$	mm
Module Height	5.2	$\pm 0.3$	mm
PCB Thickness	1.0	$\pm 0.16$	mm
Module Weight	48.0	$\pm 2.4$	g



### c) Assembly

Connectors on the board are provided for easy wiring with the LED driver and between modules

[Front connector]

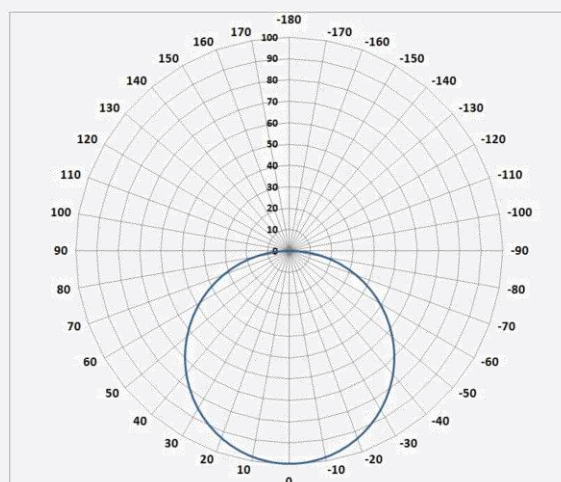


### d) Structure

Item	Specification
LED	LM561B+ Middle Power LED
PCB	Material: copper, solder mask, epoxy
Connector	Reworkable poke-in connector type
Wire	0.2~0.75 mm <sup>2</sup> (24~18 AWG)

### e) Light Distribution

Polar Intensity Diagram: Beam Angle  $115 \pm 5^\circ$





## f) Thermal Management

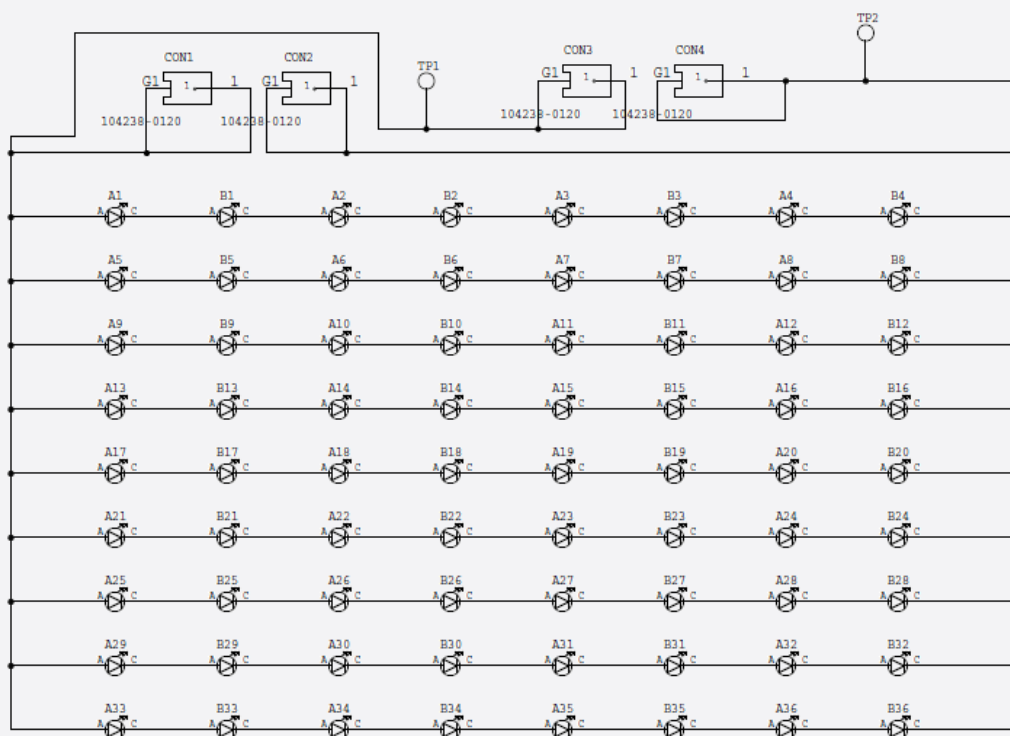
Performance temperatures are measured on “tc point” as indicated on the module.



## g) Schematic Circuit

F562A\_G2

8S X 9P



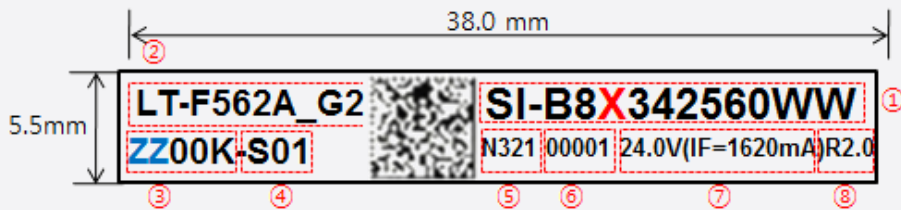
#### 4. Certification and Declaration

Item	Compliant to	Remark
Test & Certification	CE	IEC / EN 62031, IEC / EN 62471
	ENEC	-
	VDE	-
	UL	E344519
	cUL	E344519
	Photo biological Safety(LM561B+ LED)	IEC / EN 62471
Declaration	RoHS	Hazardous Substance & Material
	REACH	Hazardous Substance & Material

## 5. Label Structure

### a) Module Label

[Printing Label]



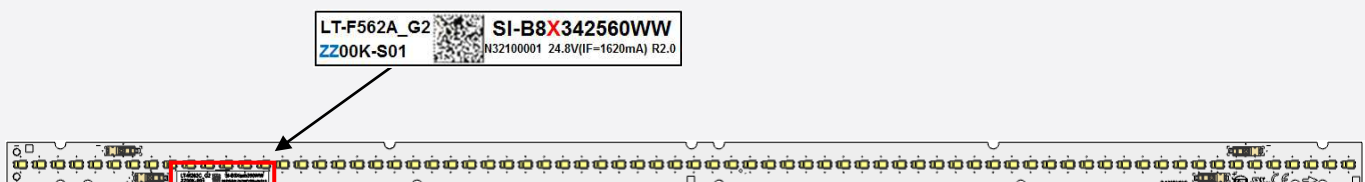
[Information of Barcode]

- ① Model code: SI-B8X342560WW  
X: V (3000K), U (3500K), T (4000K), R (5000K)
- ② Product name: LT-F562A\_G2
- ③ Color temperature: ZZ00K  
ZZ: 30, 35, 40, 50
- ④ LED maker: -S (Samsung)  
Group No.: 01 (Binning group)
- ⑤ SMT date: N321 (2013-March-21)  
A (2000), B (2001) ····· K (2010), L (2011), M (2012), N (2013) ····· (year)  
1 (January), ····· 9(September), A (October), B (November), C (December) (month)  
01, 02, 03, ····· 31th (date)
- ⑥ Serial No.: 00001~99999; Setting "00001" every working day
- ⑦ 24.0V: IF=1620mA
- ⑧ Product Revision: R2.0

[QR CODE Information]

- ① Example: SI-B8X342560WW\_ N321100001ZZ00K-S01
- ② 34 digits: Model code (14) + Space (1) + SMT date (4) + SMT line No. (1) + Serial No. (5)  
+ Color temperature (5) + Dash (1) + LED maker (1) + GROUP No. (2)

Model CODE	SI-B8X342560WW
QR CODE Information	SI-B8X342560WW_N321100001ZZ00K-S01



**b) Tray & MBB Label**

- 100mm x 50mm

Ex)



① Model code: SI-B8X342560WW

② LOT: 20150101-D0001

Packing Date(8 digit) → 20150101

Production Site(1digit) → PyeongTaek SUHIL(E), TianJIn SUHIL(D),

Serial no(4 digit) → 0001~9999, A111~A999

③ QTY: Quantity of Packaged Bar (5 Digit)

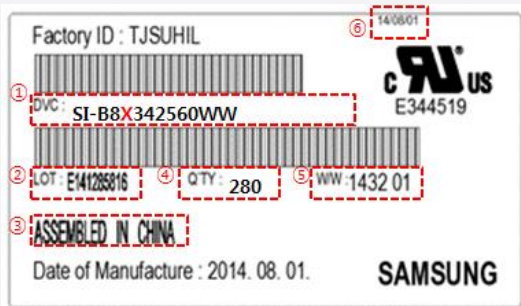
④ W/W: Production Year(2 digit) + Production Week(2 digit)

⑤ Issue date of Label: 12:year/01:month/30:day

**c) Box Label**

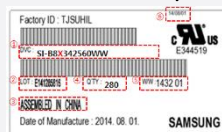
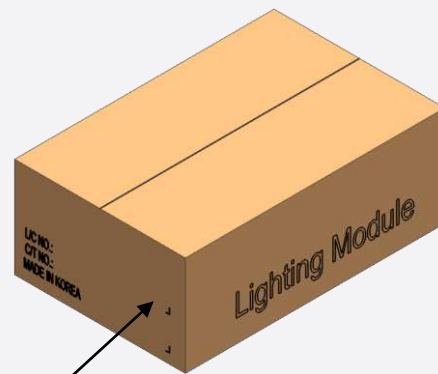
- 100mm x 50mm

Ex)



The lot number is composed of the following characters:

- ① Product code
- ② Lot ID
- ③ Place of origin
- ④ Quantity
- ⑤ Describe production week
- ⑥ Date of Issue



**6. Packing Structure**

ARTICLE	TRAY	BOX	PALLET	REMARKS
Quantity	40 ea	280 ea	5600 ea	

## 7. Precautions in Handling & Use

A. The LED Lighting Modules 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).

Also when the LEDs are illuminating, operating current should be decided after considering the ambient maximum temperature.

### B. Handling

To prevent the LED Lighting Modules from making any defectives, please handle the LED Lighting Modules with care as follows.

- (1) Don't drop the unit and don't give the unit any shocks.
- (2) Don't bend the PCB and don't touch the LED Resin.
- (3) Don't storage the Module in a dusty place or room.
- (4) Don't take the product apart.
- (5) Don't touch the LED and also PCB and other circuit parts of Module with your naked fingers or sharpness things.
- (6) Take care so that do not pull wire with hand in case of carries or moves LED Lighting Modules.

### C. Cleaning

The LED Lighting Modules should not be used in any type of fluid such as water, oil, organic solvent, etc.

It is recommended that IPA (Isopropyl Alcohol) be used as a solvent for cleaning the LED Lighting Modules.

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 Lighting Modules by the ultrasonic.

Before cleaning, a pre-test should be done to confirm whether any damage to the LED Lighting Modules will occur.

### D. Static Electricity

Static electricity or surge voltage damages the LED Lighting Modules. Please keep the working process anti-static electricity condition to prevent the Lighting from destroying, as following.

- (1) Anyone who handles the unit should be well grounded.(earth ring or anti-static glove)
- (2) Anyone who handles the unit should wear anti-electrostatic working clothes.
- (3) All kinds of device and instruments, such as working table, measuring instruments and assembly jigs in your production lines should be well grounded.

### E. Storage

The LED Lighting Modules must be stored to insert a package of a moisture absorbent material(silica gel) in a box.

### F. Others

If over voltage which exceeds the absolute maximum rating is applied to LED Lighting Modules.

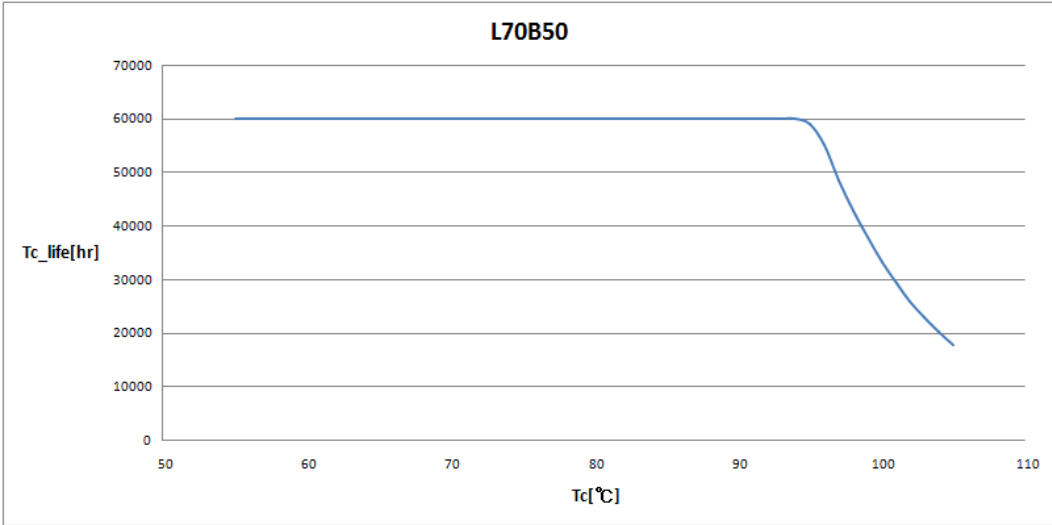
It will cause damage Circuits(that LED is included) and result in destruction.

Do not directly look into lighted LED with naked eyes.

Please use this product within 5 months, which is kept in its original packaging unopened when stocked

APPENDIX 1. Tc vs Lifetime

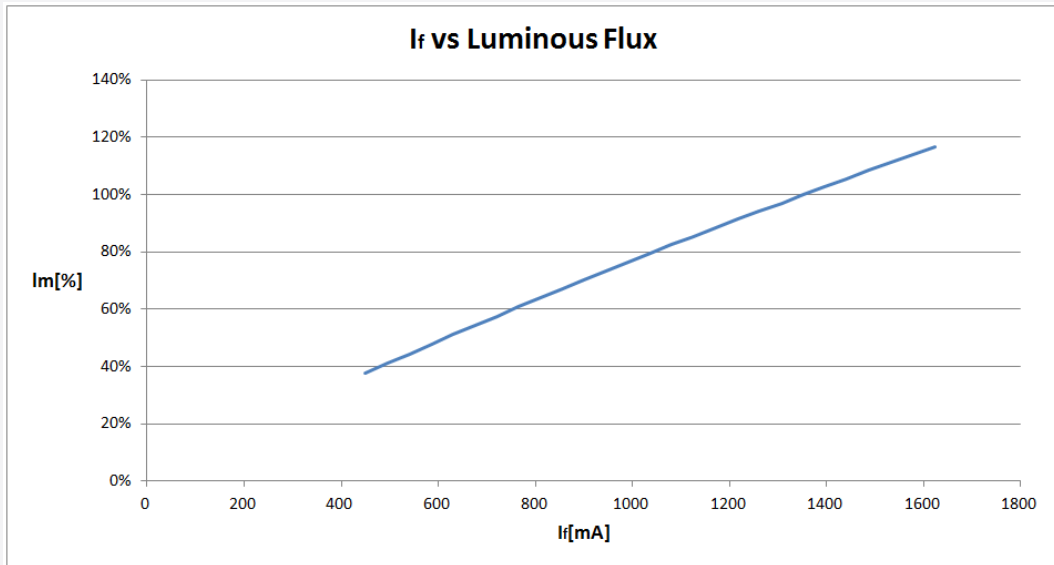
F562A\_G2



@ 150mA/LED

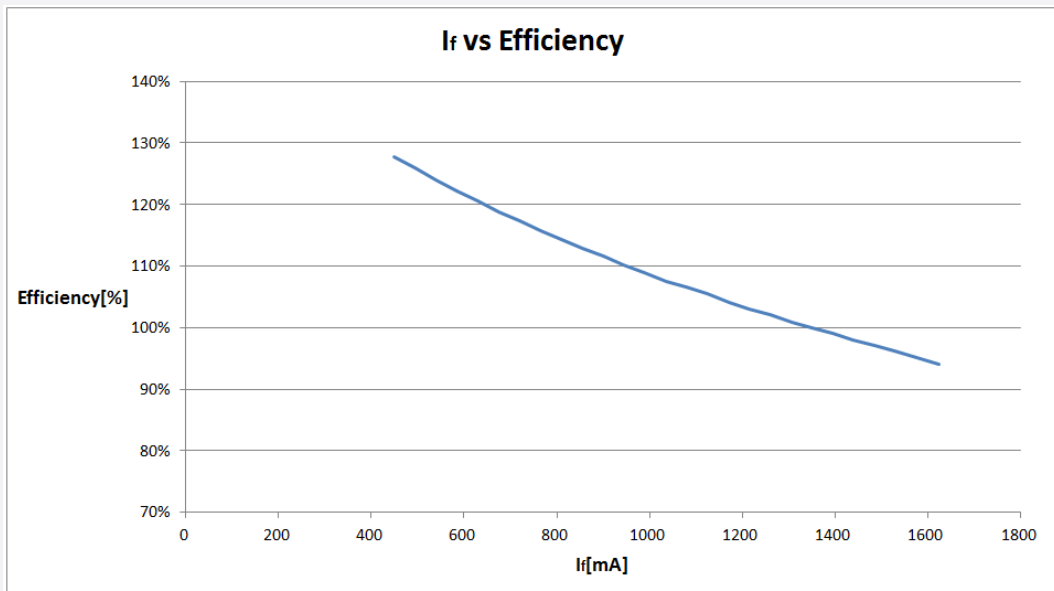
## APPENDIX 2. $I_f$ vs Luminous Flux

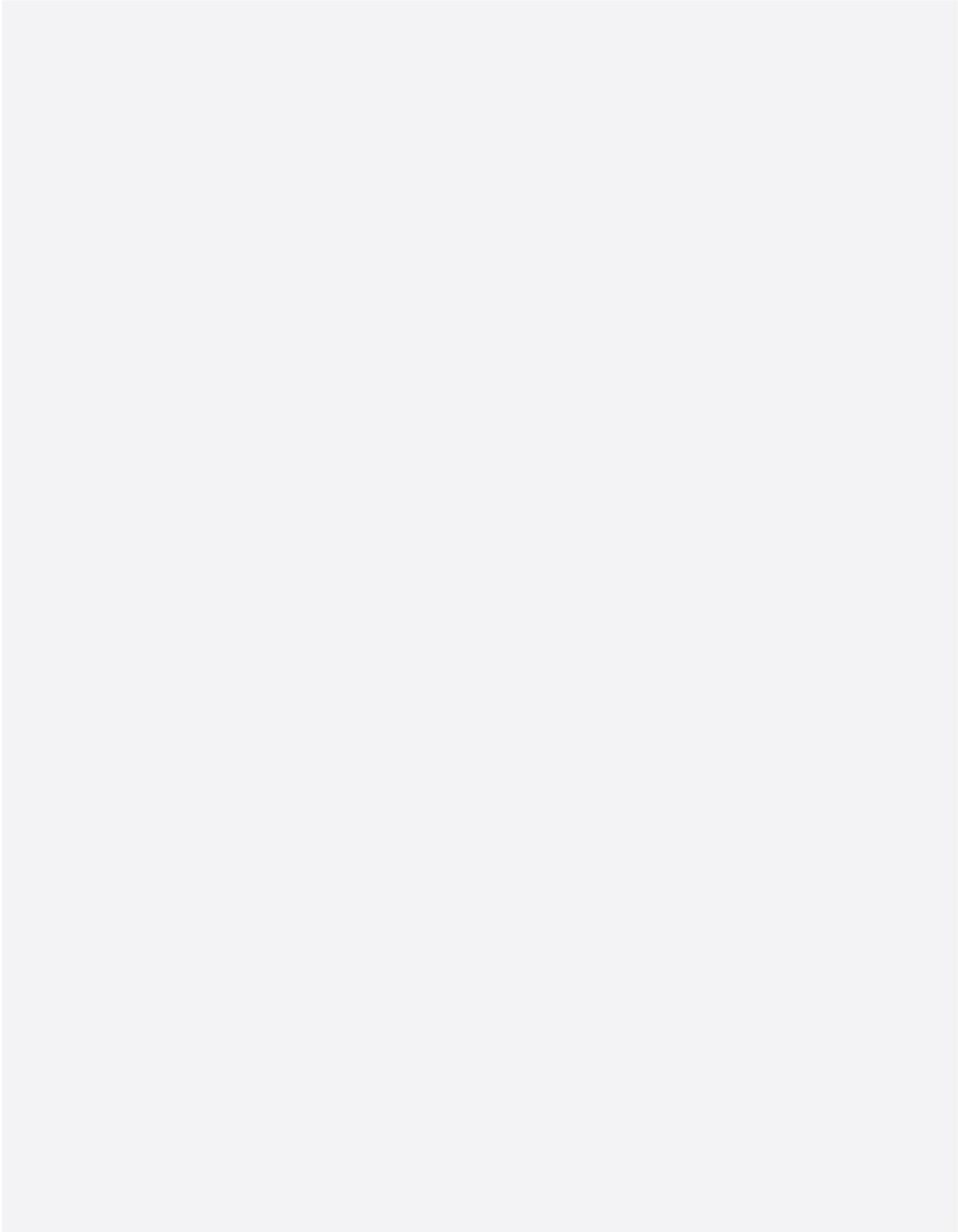
F562A\_G2



## APPENDIX 3. $I_f$ vs Efficiency

F562A\_G2







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