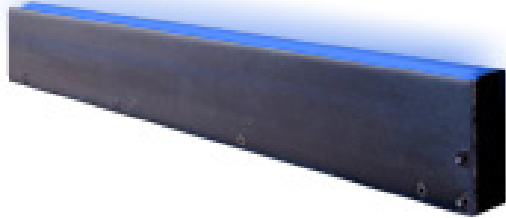




# MetaLight™ Line Light Model:LL404



**Vision Light Tech**  
creating optical solutions



Metaphase offers the industry's breakthrough performance line lights for imaging, web, and high-speed line scan applications requiring ultra-high intensity and uniformity. Our line lights are built as lean fixtures that can be easily controlled and integrated into visions systems.

Our MetaLight™ Line Lights feature an adjustable lens, enhanced cooling options, and low current consumption.

## BENEFITS:

- High Uniformity both laterally and longitudinally
- Lens Options for various beam widths and working distances
- Strobe synchronization; Control compatibility for high precision pulse-modulation and 0-10V Intensity Control capability
- Adjustable lens focusing range of mm to meters
- Backlight versions for web backlight & silhouetting applications
- From 1" to 120" (10ft) in length
- Built-in constant current driver(s) provides consistent illumination output
- 24V version require no special controllers; simply provide 24VDC

## APPLICATIONS:

- Road Surface Inspection
- Bottle Inspection
- High Speed Scanning
- Geometry Measurement
- Detection of Holes
- Sheet Inspection
- Web Inspection
- Print Inspection
- Fabrics Inspection
- Solar Cells

## RATINGS:



## DOMINANT WAVELENGTH:

Part #	Color	Power Supply
LL404-W-24	White 5500K	
LL404-R-24	Red 630nm	
LL404-B-24	Blue 470nm (Optional 455nm)	
LL404-G-24	Green 530nm	24 volt power supply available upon request.
LL404-IRN-24	Infrared 850nm	

10 ft. flying leads come standard on all products.  
Light features built-in constant current driver.  
No expensive controller required.

### Vision Light Tech B.V.

Protonenlaan 22, 5405 NE UDEN, P.O. Box 345, 5400 AH UDEN, The Netherlands

Phone: +31 (0)413 26 00 67, Fax +31 (0)413 26 09 38, E-mail: inquiry@vlt.nl, Website: www.vlt.nl

Trade register No. 17150044, VAT No. NL8112.30.946.B01



# MetaLight™ Line Light

## Model:LL404



**Vision Light Tech**  
creating optical solutions

### ELECTRICAL & CONTROLS:

Current Consumption	0.75A - 1.0A
Light Intensity	+/-5%
Illuminance	220,000 Lux
Operating Temperature	-40°F(-45°) to 100°F (37.8°C)
Lifetime Hours	75,000 Hours

### WIRING DIAGRAM:

RED	+24VDC
GREEN	Signal Ground
BLACK	Ground
WHITE	0-10VDC Intensity Control

18 AWG 4 WIRES CABLE X 1

When not using intensity control, connect 0-10V control line to +24 (Max Intensity Control = 25V) and intensity control ground to ground

### HOUSING:

Dimensions	Length: 16in / 406.4mm Width: 1in / 25.4mm Height: 2.95in / 74.88mm
Weight	1.25lb/ 566.99g
Housing	Aluminum
Finish	Powder Coating - Black

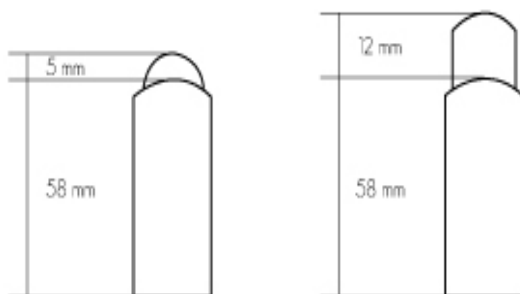
### WIRING DIAGRAM:

PIN #	Function
1	+24VDC
2	0-10VDC Intensity Control
3	Ground
4	Signal Ground



### FOCAL LENS:

#### MetaLight Line Light Lens Options



#### Vision Light Tech B.V.

Protonenlaan 22, 5405 NE UDEN, P.O. Box 345, 5400 AH UDEN, The Netherlands

Phone: +31 (0)413 26 00 67, Fax +31 (0)413 26 09 38, E-mail: inquiry@vlt.nl, Website: www.vlt.nl

Trade register No. 17150044, VAT No. NL8112.30.946.B01

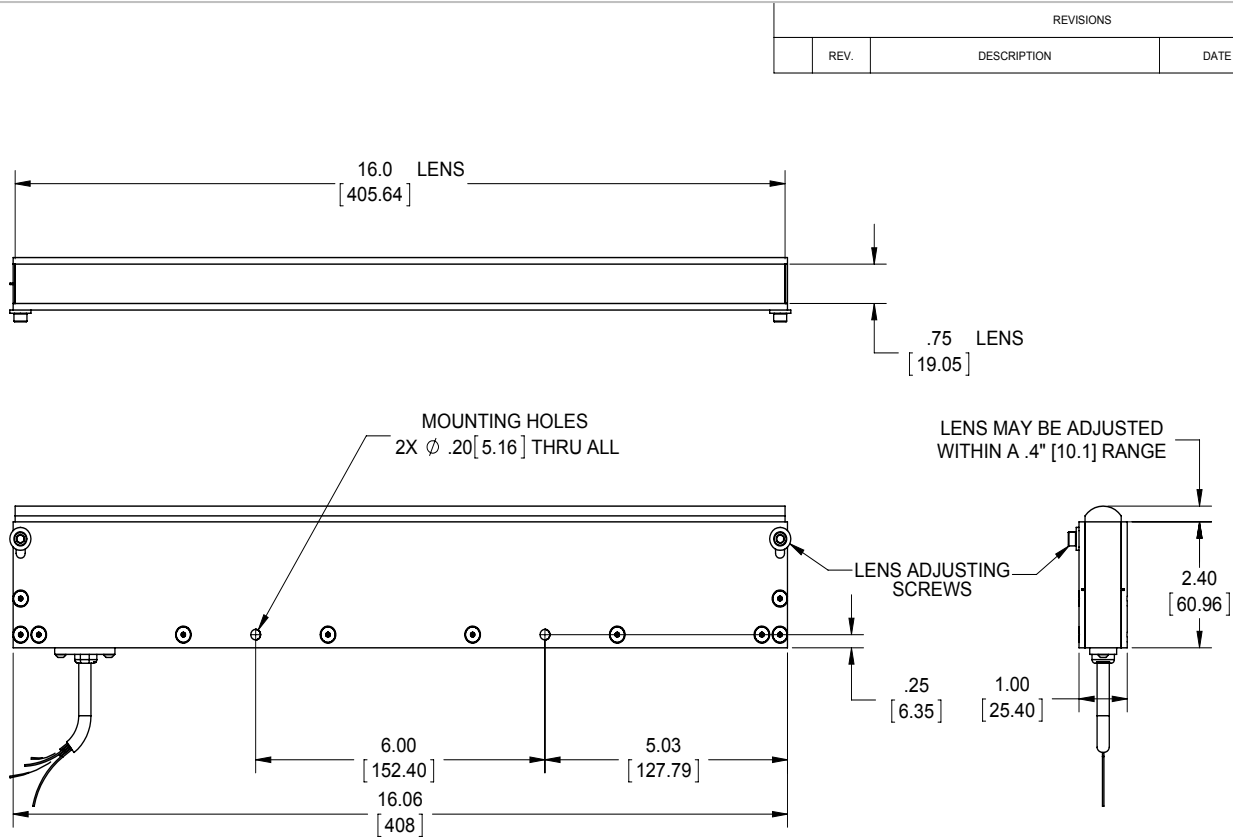


# MetaLight™ Line Light Model:LL404



**Dision Light Tech**  
creating optical solutions

## DRAWING & DETAILS:



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED

Metaphase Technologies, Inc. 3412 Progress Drive, Unit C, Bensalem, PA. 19020 215-639-8699 Fax 215-639-0977



QUANTITY:	Per order
MATERIAL:	See BOM
FINISH:	Black Anodize
TREATMENT:	N/A

TOLERANCE/FINISH UNLESS OTHERWISE SPECIFIED			
INCHES(MM)		125V RMS [RA3.2um]	
X	X	.XX	.XXX
[±.76]	[±.030]	[±.010]	[±.005]
		[±.25]	[±.13]
			ANGLES±1°

THIS DOCUMENT IS THE PROPERTY OF METAPHASE TECHNOLOGIES, INC. WHOM MAY LOAN IT, SUBJECT TO RETURN UPON DEMAND. IT INCLUDES CONFIDENTIAL & PROPRIETARY INFORMATION WHICH MAY NOT BE DISCLOSED TO ANY THIRD PARTY, AND/OR USED FOR ANY PURPOSE CONTRARY TO ITS INTENDED USE, WITHOUT THE EXPRESSED PRIOR WRITTEN CONSENT OF METAPHASE TECHNOLOGIES, INC.

TITLE	Top Assy.; 16" Light		
USED ON	Per customer		
SIZE	DRAWING NUMBER	REV	
B	LL404-1	A	
SCALE	1:2	SHEET	1 OF 2

*The T.H.L.*  
Approval Signature

01/11 2013  
Date

## ORDERING INFORMATION:

• LL404 -  - 24 -

**Back Line Light Option:**  
Replace designator "LL" with "BLL" on the prefix for units deployed in transmitted imaging applications.  
ex: BLL404-R-24

**W**- White 6000k  
**R**- Red 630nm  
**G**- Green 530nm  
**B**- Blue 470 nm  
(Optional 450nm)  
**IRN**- Infrared 850nm

\***BLANK**- 10 ft. Flying Leads  
**T**- M12 Quick Disconnect  
**ILD**- In Line Dimmer  
**ILS**- In Line Strobe (customer provide trigger info)  
**LL** - Long Focal Lens

\* Intensity will be lower for NON-Fan option

## Vision Light Tech B.V.

Protonenlaan 22, 5405 NE UDEN, P.O. Box 345, 5400 AH UDEN, The Netherlands  
Phone: +31 (0)413 26 00 67, Fax +31 (0)413 26 09 38, E-mail: inquiry@vlt.nl, Website: www.vlt.nl  
Trade register No. 17150044, VAT No. NL8112.30.946.B01