



MetaBright™ Line Light Model:MB-LL1407



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 MetaBright™ Line Lights feature an adjustable lens and low current consumption.

BENEFITS:

- High Uniformity both laterally and longitudinally
- High Intensity, over 1 million Lux
- Lens Options for various beam widths and working distances
- Available in various Light wavelengths including IR, UV and RGB
- 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) - consistent illumination output
- 24V version require no special controllers; simply provide 24VDC

APPLICATIONS:

- Road Surface Inspection
- Bottle Inspection
- High Speed Scanning
- Sheet Inspection
- Web Inspection
- Print Inspection

RATINGS:



DOMINANT WAVELENGTH:

Part #	Color	Power Supply
MB-LL1407-W-24	White 5500K	
MB-LL1407-R-24	Red 630nm	
MB-LL1407-B-24	Blue 470nm (Optional 455nm)	
MB-LL1407-G-24	Green 530nm	24 volt power supply available upon request.
MB-LL1407-IRN-24	Infrared 850nm	
MB-LL1407-IRL-24	Infrared 880nm	
MB-LL1407-UVL-24	UV 395nm	
MB-LL1407-UVS-24	UV 365nm	

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.

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



MetaBright™ Line Light

Model:MB-LL1407



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ELECTRICAL & CONTROLS:

Current Consumption	14 A
Light Intensity	+/-5%
Illuminance	1.6Million Lux
Operating Temperature	-40°F(-45°) to 100°F (37.8°C)
Lifetime Hours	75,000 Hours

HOUSING:

Dimensions	Length: 67.03in/1702.6mm Width: 1.5in/38.1mm Height: 4.58in/116.2mm
Weight	15lb/ 6803.89 g
Housing	Aluminum
Finish	Powder Coating - Black

WIRING DIAGRAM:

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

16 AWG 4 WIRES CABLE X 1 w/ 24 AWG 2 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

WIRING DIAGRAM:

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



FOCAL LENS:

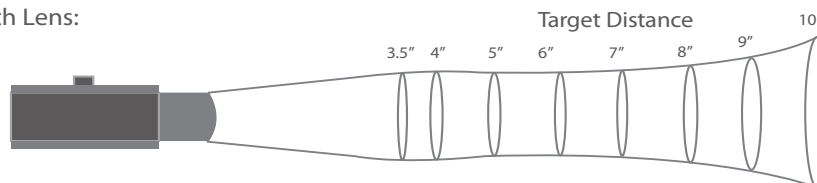
KEY: values in parenthesis are millimeter measurements

Standard Focal Length Lens:



Target Distance	0.5" (13)	0.75" (19)	1.00" (25)	1.25" (32)	1.50" (38)	2.00" (51)	2.50" (68)	3.00" (88)	3.50" (89)
Intensity (million LUX)	.80	1.27	1.21	1.18	1.16	.90	.66	.47	.32
Line Width	0.4 (10)	.25 (6.3)	.2 (5)	.2 (5)	.18 (4.6)	.18 (4.6)	.18 (4.6)	.3 (7.6)	>.3 (10)

Longer Focal Length Lens:



Target Distance	3.5" (89)	4.0" (102)	5.0" (127)	6.0" (162)	7.0" (178)	8.0" (203)	9.0" (229)	10.0" (264)
Intensity (million LUX)*	1.07	1.1	1.1	1.1	1.1	1.09	1.04	.98
Line Width	.2 (5)	.2 (5)	.2 (5)	.35 (8.9)	.4 (10)	.4 (10)	.5 (12.7)	.6 (15.2)

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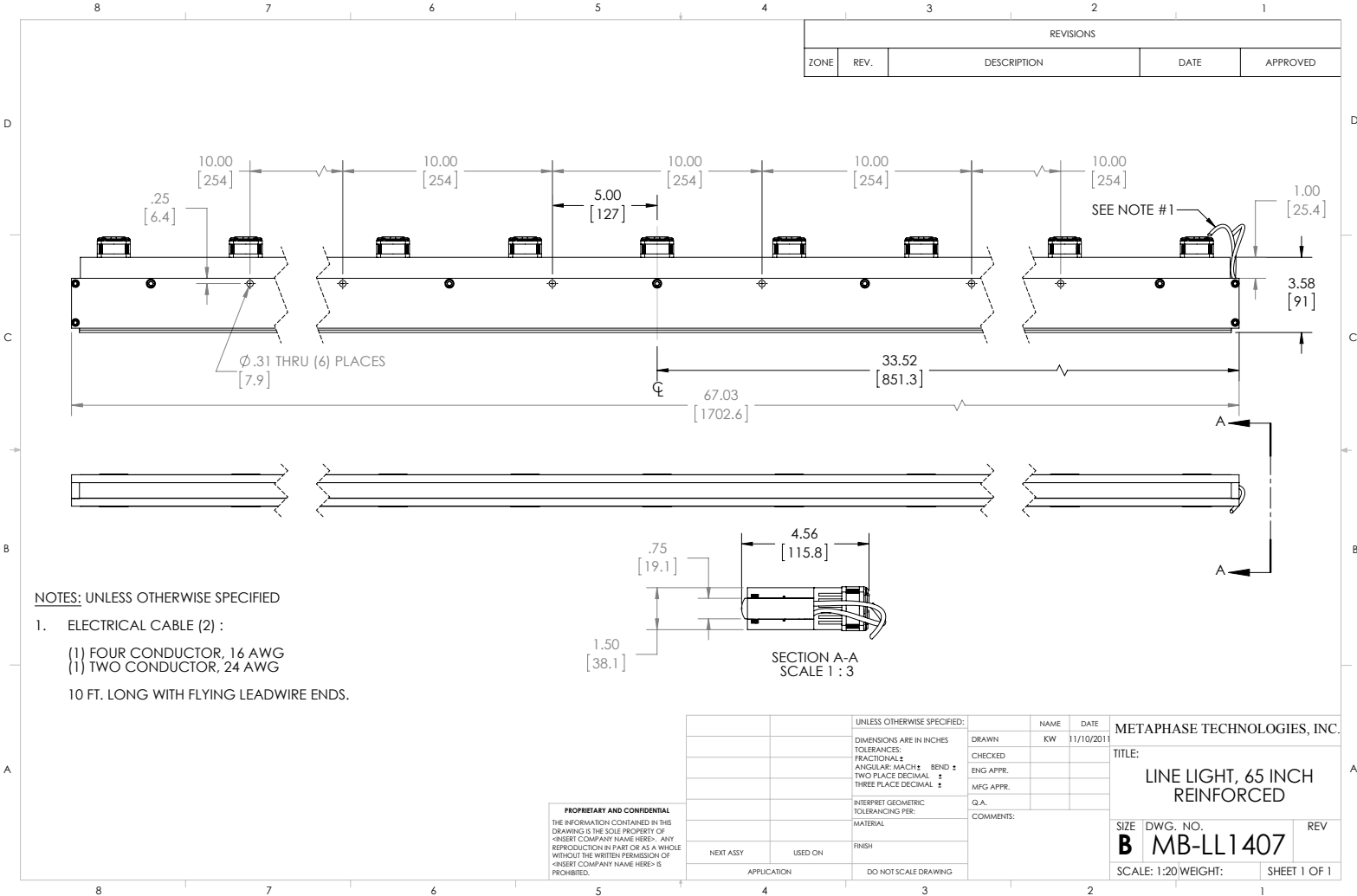
MetaBright™ Line Light

Model:MB-LL1407



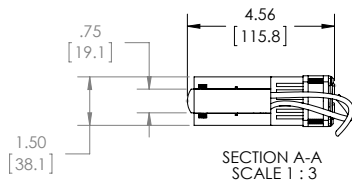
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DRAWING & DETAILS:



NOTES: UNLESS OTHERWISE SPECIFIED

- ELECTRICAL CABLE (2) :
 - (1) FOUR CONDUCTOR, 16 AWG
 - (1) TWO CONDUCTOR, 24 AWG
 10 FT. LONG WITH FLYING LEADWIRE ENDS.



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UNLESS OTHERWISE SPECIFIED:		NAME	DATE	METAPHASE TECHNOLOGIES, INC.
DIMENSIONS ARE IN INCHES		KW	11/10/2011	TITLE:
TOLERANCES:				LINE LIGHT, 65 INCH REINFORCED
FRACTIONAL: ±				SIZE DWG. NO.
ANGULAR: MACH: ± BEND: ±				B MB-LL1407
TWO PLACE DECIMAL: ±				REV
THREE PLACE DECIMAL: ±				
INTERPRET GEOMETRIC TOLERANCING PER:	MATERIAL:	COMMENTS:		SCALE: 1:20 WEIGHT:
				SHEET 1 OF 1
NEXT ASSY	USED ON	FINISH		
APPLICATION	DO NOT SCALE DRAWING			

ORDERING INFORMATION:

• MB - LL 1407 - □ - 24 - □

Back Line Light Option:
Replace designator "LL" with "BLL" on the prefix for units deployed in transmitted imaging applications.
ex: MB-BLL106-R-24

- W**- White 6000k
- R**- Red 630nm
- G**- Green 530nm
- B**- Blue 470 nm (Optional 450nm)
- IRN**- Infrared 850nm
- UVL**- (long) 395nm
- UVS**- (short) 365nm

- ***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
- NF**- No Fans

* Intensity will be lower for NON-Fan option