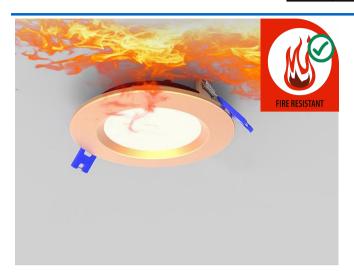
# BL4-302B-BFR 4" Fire Rated LED Concave Panel Light

Catalog #	4	Prepared	l by	LiteHarbor
Project		Date		
Notes				



#### DESCRIPTION

The concave lens design of Liteharbor Mars Light series creates muted illumination to enhance residential or commercial spaces without sacrificing brightness. With 2 Hour Fire Resistance to meet and exceed strict fire safety codes with only 1/2" clearance, this ultra thin recessed LED Panel is absolutely perfect for tight spaces, soffits and insulated and dropped ceilings. This LED is 9 watts and replaces a 45 watt halogen Save up to 80% energy for same light output. The thin Panel profile with spring clips allows for quick and easy installation. Ideal for confined spaces and suitable for damp locations.

# **MOUNTING**

Cut hole in ceiling and snap fixture in opening with attached spring clips. 2" above ceiling clearance required for driver.

#### **APPLICATIONS**

- hospitality Retail
- hotels Museum
- offices Commercial
- Kitchens
- indoor / outdoor residential,
- shopping mall stores

#### LISTING/WARRANTY

- ETL to US and Canadian standards for damp location W/Feed through.
- 3 Year Limited Warranty.

\*Other special requirements please confirm with our sales.



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E-mail: info@liteharbor.com

# **FEATURES**

- PoE scheme or LED quick connector provided.
- Available in all 4" round openings.
- Retrofit or New Construction.
- 1/2" Thin Install Directly Under Joists, Maximum Layout Flexibility.
- Comes with Junction Box & Driver, No Housing Required.
- Robust, durable and lightweight.
- 3CCT range changeablen,3000K, 4000K and 5000K, convenient inventory and cost savings.
- No Flickering, noise or RF interference
- Easy to install to suspended ceiling grids
- No UV, IR or Mercury
- Anti-glare



2 hour fire rated



**Damp Location** 



Color Temperature



Dim To Warm



IC Rated



Airtight



3 Year Limited Warranty



ETL Certificate

#### POE SOLUTION

Liteharbor PoE solution with single/double ethernet interface"One in" or "One in One out"design. It's provides RJ45 wiring system suitable for CAT5, CAT6, CAT7, CAT8 Ethernet Cable with UL listed . PoE technology sends 10/45 Gbps of data and 30W, 60W up to 90W of power budget to devices over Cat7 and Cat8 Ethernet cables for a maximum distance of 100m.



Website: www.liteharbor.com

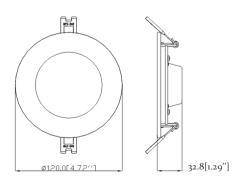
Specifications subject to change w/o notice

# **SPECIFICATION**

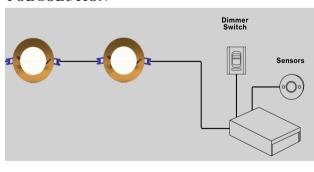
DESCRIPTION         BL-302A-BFR         BL-302B-BFR         BL-302-BFR           Wattage         9W         9W           Luminosity         900 lm         900 lm           Luminous Flux         700 lm         700 lm           Lumens / Watt         100 lm/w         100 lm/w           CRI         90+         90+           Colour Temperature         3000K, 4000K, 6500K/3CCT(3000K-4000K-5000K)         3000K, 4000K, 6500K/3CCT(3000K-4000K-5000K)           Driver Input         24V         120V AC or 120V-277V AC 50/60 Hz           Power Factor         -         0.98           Dimming         RGB+W / Tunable White         TRIAC Dimmers 10%-100% (120V only)           Location         Insulated Ceiling & Damp Locations         Insulated Ceiling & Damp Locations           Finish         White,Black,Satin Nickel         White,Black,Satin Nickel           Dimensions         Ø 4.72** H 1.29*         Ø 4.72** H 1.15**           Wire         Cat5/Cat6         FT4/FT6           Working Temperature         -20**C to +60**C         -20**C to +60**C           Working Humidity         10% - 70%         10% - 70%           IP Rating         20         20           Input Current         -         0.7A           UGR	Lenienion			
Luminosity         900lm         900lm           Luminous Flux         700lm         700lm           Lumens / Watt         100lm/w         100lm/w           CRI         90+         90+           Colour Temperature         3000K, 4000K, 6500K/3CCT(3000K-4000K-5000K)         3000K, 4000K, 6500K/3CCT(3000K-4000K-5000K)           Driver Input         24V         120V AC or 120V-277V AC 50/60 Hz           Power Factor         -         0.98           Dimming         RGB+W / Tunable White         TRIAC Dimmers 10%-100% (120V only)           Location         Insulated Ceiling & Damp Locations         Insulated Ceiling & Damp Locations           Finish         White,Black,Satin Nickel         White,Black,Satin Nickel           Dimensions         Ø 4.72"* H 1.29"         Ø 4.72"* H 1.15"           Wire         Cat5/Cat6         FT4/FT6           Working Temperature         -20°C to +60°C         -20°C to +60°C           Working Humidity         10% - 70%         10% - 70%           IP Rating         20         20           Input Current         -         0.7A           Output Current         -         360mA           Power Efficiency         >90%         >90%           UGR         <18         <18	DESCRIPTION	BL-302A-BFR	BL-302B-BFR	BL-302-BFR
Luminous Flux         700lm         700lm           Lumens / Watt         100lm/w         100lm/w           CRI         90+         90+           Colour Temperature         3000K, 4000K, 6500K/3CCT(3000K-4000K-5000K)         3000K, 4000K, 6500K/3CCT(3000K-4000K-5000K)           Driver Input         24V         120V AC or 120V-277V AC 50/60 Hz           Power Factor         -         0.98           Dimming         RGB+W / Tunable White         TRIAC Dimmers 10%-100% (120V only)           Location         Insulated Ceiling & Damp Locations         Insulated Ceiling & Damp Locations           Finish         White,Black,Satin Nickel         White,Black,Satin Nickel           Dimensions         4.72** H 1.29*         4.72** H 1.15*           Wire         Cat5/Cat6         FT4/FT6           Working Temperature         -20*C to +60*C         -20*C to +60*C           Working Humidity         10% - 70%         10% - 70%           IP Rating         20         20           Input Current         -         0.7A           Output Current         -         -           Power Efficiency         >90%         >90%           UGR         <18	Wattage	9W		9W
Lumens / Watt         100lm/w         100lm/w           CRI         90+         90+           Colour Temperature         3000K, 4000K, 6500K/3CCT(3000K-4000K-5000K)         3000K, 4000K, 6500K/3CCT(3000K-4000K-5000K)           Driver Input         24V         120V AC or 120V-277V AC 50/60 Hz           Power Factor         -         0.98           Dimming         RGB+W / Tunable White         TRIAC Dimmers 10%-100% (120V only)           Location         Insulated Ceiling & Damp Locations         Insulated Ceiling & Damp Locations           Finish         White,Black,Satin Nickel         White,Black,Satin Nickel           Dimensions         \$0.4.72"* H 1.29"         \$0.4.72"* H 1.15"           Wire         Cat5/Cat6         FT4/FT6           Working Temperature         -20°C to +60°C         -20°C to +60°C           Working Humidity         10% - 70%         10% - 70%           IP Rating         20         20           Input Current         -         0.7A           Output Current         -         360mA           Power Efficiency         >90%         >90%           UGR         <18	Luminosity	9	00lm	900lm
CRI         90+         90+           Colour Temperature         3000K, 4000K, 6500K/3CCT(3000K-4000K-5000K)         3000K, 4000K, 6500K/3CCT(3000K-4000K-5000IK)           Driver Input         24V         120V AC or 120V-277V AC 50/60 Hz           Power Factor         -         0.98           Dimming         RGB+W / Tunable White         TRIAC Dimmers 10%-100% (120V only)           Location         Insulated Ceiling & Damp Locations         Insulated Ceiling & Damp Locations           Finish         White,Black,Satin Nickel         White,Black,Satin Nickel           Dimensions         Ø 4.72** H 1.29**         Ø 4.72** H 1.15**           Wire         Cat5/Cat6         FT4/FT6           Working Temperature         -20°C to +60°C         -20°C to +60°C           Working Humidity         10% − 70%         10% − 70%           IP Rating         20         20           Input Current         -         0.7A           Output Current         -         360mA           Power Efficiency         >90%         >90%           UGR         <18	Luminous Flux	7	700lm	700lm
Colour Temperature         3000K, 4000K, 6500K/3CCT(3000K-4000K-5000K)         3000K, 4000K, 6500K/3CCT(3000K-4000K-5000I)           Driver Input         24V         120V AC or 120V-277V AC 50/60 Hz           Power Factor         -         0.98           Dimming         RGB+W / Tunable White         TRIAC Dimmers 10%-100% (120V only)           Location         Insulated Ceiling & Damp Locations         Insulated Ceiling & Damp Locations           Finish         White,Black,Satin Nickel         White,Black,Satin Nickel           Dimensions         Ø 4.72** H 1.29**         Ø 4.72** H 1.15**           Wire         Cat5/Cat6         FT4/FT6           Working Temperature         -20°C to +60°C         -20°C to +60°C           Working Humidity         10% – 70%         10% – 70%           IP Rating         20         20           Input Current         -         0.7A           Output Current         -         360mA           Power Efficiency         >90%         >90%           UGR         <18	Lumens / Watt	10	00lm/w	100lm/w
Driver Input         24V         120V AC or 120V-277V AC 50/60 Hz           Power Factor         -         0.98           Dimming         RGB+W / Tunable White         TRIAC Dimmers 10%-100% (120V only)           Location         Insulated Ceiling & Damp Locations           Finish         White,Black,Satin Nickel         White,Black,Satin Nickel           Dimensions         ∅ 4.72"* H 1.29"         ∅ 4.72"* H 1.15"           Wire         Cat5/Cat6         FT4/FT6           Working Temperature         -20°C to +60°C         -20°C to +60°C           Working Humidity         10% − 70%         10% − 70%           IP Rating         20         20           Input Current         -         0.7A           Output Current         -         360mA           Power Efficiency         >90%         >90%           UGR         <18	CRI		90+	90+
Power Factor         -         0.98           Dimming         RGB+W / Tunable White         TRIAC Dimmers 10%-100% (120V only)           Location         Insulated Ceiling & Damp Locations         Insulated Ceiling & Damp Locations           Finish         White,Black,Satin Nickel         White,Black,Satin Nickel           Dimensions         ∅ 4.72"* H 1.15"         ∅ 4.72"* H 1.15"           Wire         Cat5/Cat6         FT4/FT6           Working Temperature         -20°C to +60°C         -20°C to +60°C           Working Humidity         10% − 70%         10% − 70%           IP Rating         20         20           Input Current         -         0.7A           Output Current         -         360mA           Power Efficiency         >90%         >90%           UGR         <18         <18           Beam Angle         120°         120°           THD         <20%         <20%           Installation         Recessed Ceiling Mount         Recessed Ceiling Mount           Lifespan         50,000 Hours at 70% Light Output         50,000 Hours at 70% Light Output           Executive Standard         ETL/ENERGY STAR         ETL/ENERGY STAR	Colour Temperature	3000K, 4000K, 6500K/3	CCT(3000K-4000K-5000K)	3000K, 4000K, 6500K/3CCT(3000K-4000K-5000K)
Dimming         RGB+W / Tunable White         TRIAC Dimmers 10%-100% (120V only)           Location         Insulated Ceiling & Damp Locations         Insulated Ceiling & Damp Locations           Finish         White,Black,Satin Nickel         White,Black,Satin Nickel           Dimensions         Ø 4.72"* H 1.29"         Ø 4.72"* H 1.15"           Wire         Cat5/Cat6         FT4/FT6           Working Temperature         -20°C to +60°C         -20°C to +60°C           Working Humidity         10% − 70%         10% − 70%           IP Rating         20         20           Input Current         -         0.7A           Output Current         -         360mA           Power Efficiency         >90%         >90%           UGR         <18	Driver Input		24V	120V AC or 120V-277V AC 50/60 Hz
Location         Insulated Ceiling & Damp Locations         Insulated Ceiling & Damp Locations           Finish         White,Black,Satin Nickel         White,Black,Satin Nickel           Dimensions         ∅ 4.72"* H 1.29"         ∅ 4.72"* H 1.15"           Wire         Cat5/Cat6         FT4/FT6           Working Temperature         -20°C to +60°C         -20°C to +60°C           Working Humidity         10% − 70%         10% − 70%           IP Rating         20         20           Input Current         -         0.7A           Output Current         -         360mA           Power Efficiency         >90%         >90%           UGR         <18	Power Factor		-	0.98
Finish         White,Black,Satin Nickel         White,Black,Satin Nickel           Dimensions         ∅ 4.72"* H 1.29"         ∅ 4.72"* H 1.15"           Wire         Cat5/Cat6         FT4/FT6           Working Temperature         -20°C to +60°C         -20°C to +60°C           Working Humidity         10% − 70%         10% − 70%           IP Rating         20         20           Input Current         -         0.7A           Output Current         -         360mA           Power Efficiency         >90%         >90%           UGR         <18	Dimming	RGB+W /	Tunable White	TRIAC Dimmers 10%-100% (120V only)
Dimensions         Ø 4.72"* H 1.29"         Ø 4.72"* H 1.15"           Wire         Cat5/Cat6         FT4/FT6           Working Temperature         -20°C to +60°C         -20°C to +60°C           Working Humidity         10% − 70%         10% − 70%           IP Rating         20         20           Input Current         -         0.7A           Output Current         -         360mA           Power Efficiency         >90%         >90%           UGR         <18	Location	Insulated Ceiling	g & Damp Locations	Insulated Ceiling & Damp Locations
Wire         Cat5/Cat6         FT4/FT6           Working Temperature         -20°C to +60°C         -20°C to +60°C           Working Humidity         10% – 70%         10% – 70%           IP Rating         20         20           Input Current         -         0.7A           Output Current         -         360mA           Power Efficiency         >90%         >90%           UGR         <18	Finish	White,Black,Satin Nickel		White,Black,Satin Nickel
Working Temperature         -20°C to +60°C         -20°C to +60°C           Working Humidity         10% - 70%         10% - 70%           IP Rating         20         20           Input Current         -         0.7A           Output Current         -         360mA           Power Efficiency         >90%         >90%           UGR         <18	Dimensions	∅ 4.72"* H 1.29"		∅ 4.72"* H 1.15"
Working Humidity         10% – 70%         10% – 70%           IP Rating         20         20           Input Current         -         0.7A           Output Current         -         360mA           Power Efficiency         >90%         >90%           UGR         <18	Wire	Cat5/Cat6		FT4/FT6
IP Rating         20         20           Input Current         -         0.7A           Output Current         -         360mA           Power Efficiency         >90%         >90%           UGR         <18	Working Temperature	-20°C to +60°C		-20°C to +60°C
Input Current         -         0.7A           Output Current         -         360mA           Power Efficiency         >90%         >90%           UGR         <18	Working Humidity	10% – 70%		10% – 70%
Output Current         -         360mA           Power Efficiency         >90%         >90%           UGR         <18	IP Rating	20		20
Power Efficiency >90% >90%  UGR <a href="#"></a> <a href="#"><a hr<="" td=""><td>Input Current</td><td colspan="2">-</td><td>0.7A</td></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a></a>	Input Current	-		0.7A
UGR <a href="#">&lt;18</a> <18	Output Current		-	360mA
Beam Angle120°120°THD<20%	Power Efficiency	>	>90%	>90%
THD <a href="mailto:20%">&lt;20%</a> Installation Recessed Ceiling Mount Lifespan 50,000 Hours at 70% Light Output Executive Standard ETL/ENERGY STAR ETL/ENERGY STAR	UGR		<18	<18
Installation     Recessed Ceiling Mount     Recessed Ceiling Mount       Lifespan     50,000 Hours at 70% Light Output     50,000 Hours at 70% Light Output       Executive Standard     ETL/ENERGY STAR     ETL/ENERGY STAR	Beam Angle	120°		120°
Lifespan 50,000 Hours at 70% Light Output 50,000 Hours at 70% Light Output  Executive Standard ETL/ENERGY STAR ETL/ENERGY STAR	THD	<20%		<20%
Executive Standard ETL/ENERGY STAR ETL/ENERGY STAR	Installation	Recessed Ceiling Mount		Recessed Ceiling Mount
	Lifespan	50,000 Hours at 70% Light Output		50,000 Hours at 70% Light Output
Warranty 3 Year Limited for Fixture & Driver 3 Year Limited for Fixture & Driver	Executive Standard	ETL/ENERGY STAR		ETL/ENERGY STAR
	Warranty	3 Year Limited for Fixture & Driver		3 Year Limited for Fixture & Driver

# DIMENSIONS

Ceiling cut out: 4"



# POE SOLUTION



\*Other special requirements please confirm with our sales.



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Specifications subject to change w/o notice



# MARS LIGHT SERIES



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Specifications subject to change w/o notice



Other size coming soon

Item	Description	Lume
BL3-302-BFR	120V/120V-277V,Triac/0-10V Dim,6W MAX	460lm
BL3-302A-BFR	POE Single connection hole 24V,6W MAX	460lm
BL3-302B-BFR	POE Double connection hole 24V,6W MAX	460lm
BL4-302-BFR	120V/120V-277V,Triac/0-10V Dim,9W MAX	700lm
BL4-302A-BFR	POE Single connection hole 24V,9W MAX	700lm
BL4-302B-BFR	POE Double connection hole 24V,9W MAX	700lm
BL5-302-BFR	120V/120V-277V,Triac/0-10V Dim,12W MAX	930lm
BL5-302A-BFR	POE Single connection hole 24V,12W MAX	930lm
BL5-302B-BFR	POE Double connection hole 24V,12W MAX	930lm
BL6-302-BFR	120V/120V-277V,Triac/0-10V Dim,14W MAX	10801
BL6-302A-BFR	POE Single connection hole 24V,14W MAX	10801
BL6-302B-BFR	POE Double connection hole 24V,14W MAX	10801
BL9-302-BFR	120V/120V-277V,Triac/0-10V Dim,20W MAX	15001
BL9-302A-BFR	POE Single connection hole 24V,20W MAX	15001
BL9-302B-BFR	POE Double connection hole 24V,20W MAX	15001

# **ORDERING GUIDE**

Mars light Series	Mounting	Wattage	Color Temperature
□ BL4-302-BFR	□ R   Remodel	$\Box$ 6  6W/lamp	□ 30K   3000K
□ BL4-302A-BFR	□ NC  New Construction	9  9W/lamp	□ 40K   4000K
□ BL4-302B-BFR		12 12W/lamp	□ 50K   5000K
		14 14W/lamp	□ 65K   65000K
		20 20W/lamp	$\Box$ DW   Dim to Warm
			☐ TW  Tunable White

Input Voltage	Dimmable	Lu	minous Flux	Finish	
□ 120   120V	☐ Triac   Triac dimming		460lm		WH   White
□ U   120V-277V	$\Box$ 0-10V   0-10V dimming		700lm		BK   Black
$\square$ PoE   24V (PoE Scheme)			930lm		SN   Satin Nickel
			1080lm		
			1500lm		

Cable	CRI	Light Source	Instal	l Accessories
□ C4   FT4	□ 90   90+	□ CREE		Ceiling Tapper
$\Box$ C6   FT6		☐ Citizen		Ethernet Cable
□ CT5   Cat5		□ Epistar		RJ45 Connectors
□ CT6   Cat8		□ Seoul		RJ45 Crimp Tool Kit
		□ Osram		

<sup>\*</sup>Other special requirements please confirm with our sales.



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#### INSTALL ACCESSORIES

#### **Ethernet Cables Reference**



Attribute	Cat 6	Cat 7	Cat 8
Frequency	250 MHz	600MHz	2000MHz
Transmission speed	1Gbps/10 Gbps	10 Gbps	25 Gbps/40 Gbps
Distance	100m	100m	30m
Number of Connectors in	4	4	2
Cable Construction	UTP or Shielded	Shielded	Shielded
Connector Type	RJ45	RJ45	RJ45
AWG	24 AWG	30 AWG	26AWG

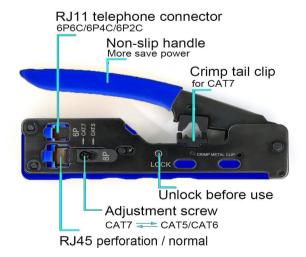
#### **RJ45 Connectors**

Modular plug clear plastic easy to DIY ethernet cable when you need.



# **Crimp Tool Kit**

All-in-one RJ11/RJ12/RJ45 Modular Tool,Pass-Through Wire Stripper Cutter Crimper for Cat5/5e Cat6/6a Cat7 Cat8 Modular Plugs Connectors with Dovetail Clip.



# **Ceiling Tapper**

Patented circular tooth tapper, Simple operation, the ceiling cut hole quickly.





# **Ethernet Cables**

Cat 6/Cat 7/Cat 8 for option.



#### **PoE Switch**

Not supplied by Liteharbor.



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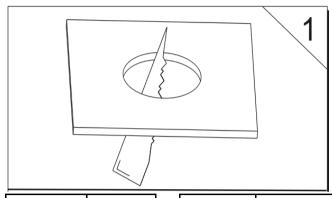
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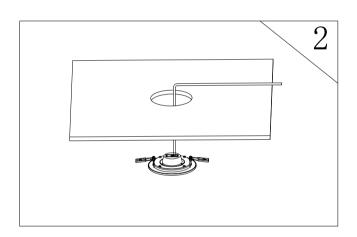
1. Determine the location for installation and cut ceiling hole in accordance with cut-hole dimensions. Refer to Hole Diameter table for appropriate sizes. (Fig. 1)



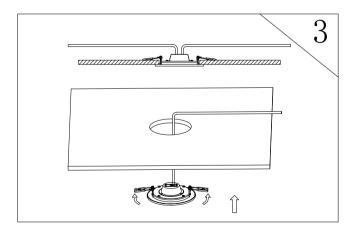
ROUND	Hole Size
Ф4.25"	4"

COLLABE	II 1 C'
SQUARE	Hole Size
4.25"*4.25"	4"*4"

2. Run Ethernet cable from the rack to the fixture location and insert the fixture.(Fig. 2)



3. Use another Ethernet cable with RJ45 terminals at both ends to connect the next fixture. (Fig. 3)



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