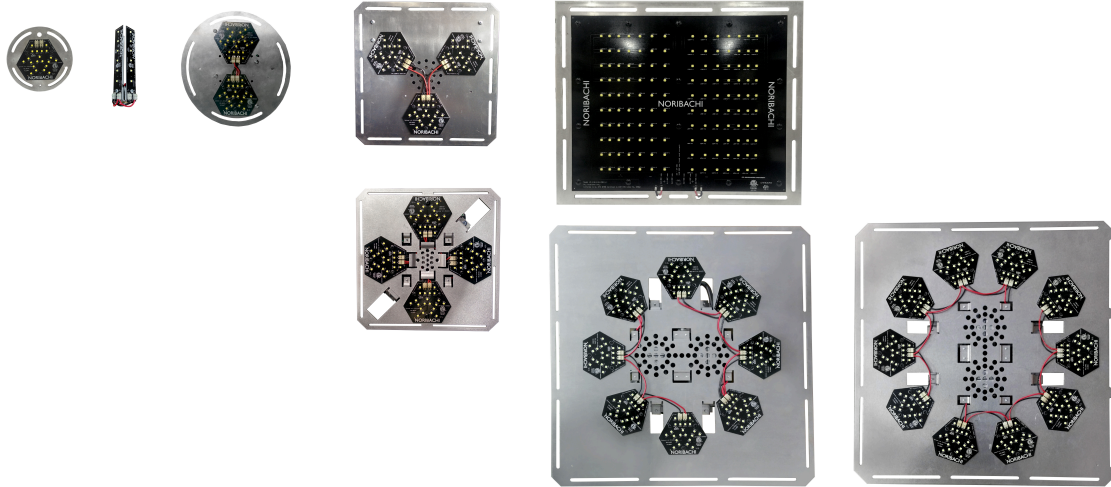


ZIPPY KITS

NORIBACHI PRODUCT FAMILY BROCHURE





Zippy Kits! are an industry-leading retrofit solution. These are the only retrofit kits available on the market that comply with UL standard I598 out of the box. They come in high lumen packages and are a one for one replacement with HID, MH or HPS bulbs. **Available in 72 Hours! Free Shipping!**

Zippy Kits! Highlights:

- L70 rated at +100,000 hours
- CRI 70 minimum
- Operating temp: -40°C to +60°C
- Non-toxic chemical/ROHS compliant
- ETL certified, meets UL and CSA safety standards
- Manufactured in the US
- Up to 140 LPW
- No UV or IR
- Mercury free, lead free

Ordering:

- Available in 72 hours
- Free shipping

Electrical Characteristics:

- Standard AC input 120/277V
- EMI: Compliance to EN61000-4-2,3,4,5,6,8,11
- FCC Title 47, Part 2, Part 15, Class A
- Power factor: >0.9
- Total harmonic distortion: <20%

Warranty:

- 5-year manufacturer's warranty
- First year includes labor
- Optional 10-year manufacturer's warranty
- U.S. manufacturing and quality control

Appearance:

- High lumen packages: 4862 – 47,463 lumens
- 5700 (CW) LEDs standard
- LED light engine mounted on sturdy aluminum plate
- Magic tabs ensure flexible mounting options
- Also includes wire connectors, fastening hardware, spacers and zip-ties for easy installation
- 120 degree beam angle standard

Light Engine Upgrades:

- Neutral white or warm white LEDs
- RGBW options
- Tight bins
- 40 and 80 degree beam angle optics

Electrical Upgrades:

- Wireless networking and controls
- Enhanced surge protection
- 0-10V, step, line voltage and bi-level dimming
- Occupancy sensor
- Photocell
- Daylight harvesting sensor
- Emergency battery backup
- 6' or 10' SO cord with twist lock plugs

At-A-Glance

Order Code	Lumens	Watts	Voltage	Color Temp	Replaces
ZIPPY-021	4,862	35	120 - 277VAC	5700K (cool white)	100-150W
ZIPPY-024	5,557	40	120 - 277VAC	5700K (cool white)	90-185W
ZIPPY-042	9,724	69	120 - 277VAC	5700K (cool white)	200-250W
ZIPPY-063	14,586	104	120 - 277VAC	5700K (cool white)	250-400W
ZIPPY-084	19,448	139	120 - 277VAC	5700K (cool white)	400-500W
ZIPPY-140	30,870	221	120 - 277VAC	5700K (cool white)	700-1000W
ZIPPY-168	37,970	271	120 - 277VAC	5700K (cool white)	750-1250W
ZIPPY-210	47,463	339	120 - 277VAC	5700K (cool white)	1000-1500W

Physical Dimensions							
Order Code	Mounting Plate Dimensions	Mounting Plate Shape	Voltage			Weight (lbs.)	Shipping Weight (lbs.)
			Length	Width	Depth		
ZIPPY-021	5.25" dia.	circle	5.25" - 13"	5.25" - 13"	3" (min)	1.06	2.81
ZIPPY-024	2" dia.	cob	3" (min)	3" (min)	8" (min)	1.71	3.48
ZIPPY-042	9" dia.	circle	9" - 24"	9" - 24"	3" (min)	1.62	3.38
ZIPPY-063	11" W x 11" L	square	11.25" - 33"	11.25" - 33"	4" (min)	3.86	5.65
ZIPPY-084	11" W x 11" L	square	11.25" - 33"	11.25" - 33"	4" (min)	3.94	5.74
ZIPPY-140	12.75" W x 15.5" L	rectangle	15.75" - 42.75"	15.75" - 42.75"	5" (min)	5.73	7.54
ZIPPY-168	20" W x 20" L	square	20" - 60"	20" - 60"	5" (min)	8.72	11.91
ZIPPY-210	20" W x 20" L	square	20" - 60"	20" - 60"	9.5" (min)	8.77	11.95

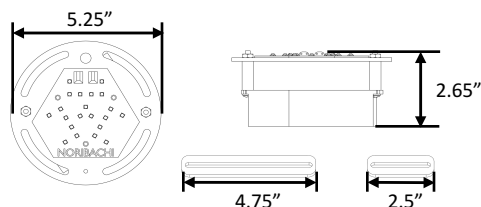
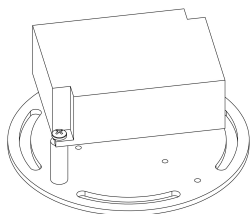
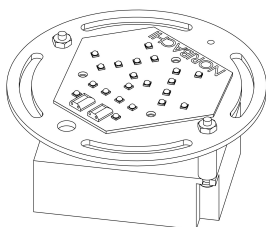
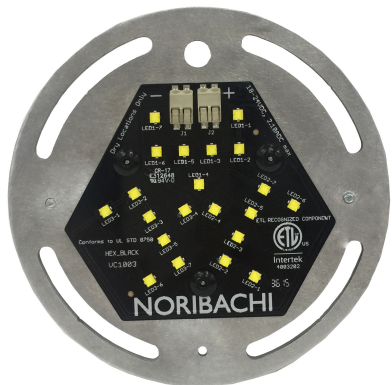
Applications										
Order Code	Common Replacements for:	Arealights	Bollard	Canopy	Cans	Cobraheads	Downlights	Floodlights	Post tops	Wallpacks
ZIPPY-021	100W MH, 150W HPS	x	x	x	x	x	x	x	x	x
ZIPPY-024	90W MH, 185W HPS	x	x						x	
ZIPPY-042	200W MH, 250W HPS	x		x	x	x	x	x	x	x
ZIPPY-063	250 - 400W MH	x		x	x	x	x	x	x	x
ZIPPY-084	400 - 500W MH	x			x	x	x	x	x	x
ZIPPY-140	700 - 1000W MH	x		x				x	x	
ZIPPY-168	750 - 1250W MH	x						x	x	
ZIPPY-210	1000 - 1500W MH	x						x	x	

ZIPPY-021



ZIPPY-021 is ideal for interior can lights as well as any location where space is at a premium.

ZIPPY-021



Product Information

Product Order Code: ZIPPY-021-CW-MT
DLC Order Code: L-C-CUS-21-REC-B-CW-MT
Common Replacement: 100W MH, 150W HPS

The Zippy-021 retrofit kit can be used in Arealight, Bollard, Canopy, Cobrahead, Downlight, Floodlight, Post Top and Wallpack lighting fixtures.

Performance Ratings and Certifications

UL 1598
UL 8750
CSA C22.2#250.0
CSA C22.2#250.13

Performance Summary

Lumens: 4,862 lumens
Lumens Per Watt (Typical): 140 LPW
Power Consumption: 35 W
Light Engine: L70 Rated Lifetime of 100,000+ hours.
CRI: Minimum 70 CRI. Custom CRI available upon request.
CCT (Typical): 3000K, 4000K, 5700K
Manufactured in the U.S. with parts from U.S. and imported.

Fixture Information

Mounting Plate: Aluminum 3003
Mounting: Universal mounting kit with four 2.5" and four 4.75" magic tabs
Length: 5.25"
Width: 5.25"
Depth: 2.65"
Weight: 1.06 lbs.
Shipping Weight: 2.81 lbs.

Fits Luminaires with Internal Dimensions of

Length: 5.25" - 13"
Width: 5.25" - 13"
Depth: 3" (minimum)

Electrical System Characteristics / Data

AC Input: 120/277 VAC (standard), 480 VAC (upgrade)
FCC: Title 47, Part 2, Part 15, Class A
EM: Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (60% load); EN61000-3-3
EM Immunity: Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61547, EN55024, light industry level (surge 4KV), criteria A
Withstand Voltage: I/P-O/P: 3.75KVAC I/P-FG: 2KVAC O/P - FG: 1.5KVAC
Isolation Resistance: I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC / 25 / 70% RH
Power Factor: PF > 0.98/115VAC, PF > 0.92/277VAC
Total Harmonic Distortion: THD < 20%
Standard Surge Protection: All-Around Protection: OVP, SCP, OLP.
Enhanced Surge Protection: Protects against surges according to IEEE C62.41.2 C and ANSI C136.2
Emergency Batt. Backup: Optional upgrades available.

Optional Controls:

Wireless Controls: Optional via Pulse Wireless Mesh Network
Dimming: Standard: 0-10V Optional: step, line voltage or bi-level
Daylight Harvesting Sensor: Optional
Occupancy Sensor: Optional

Warranty

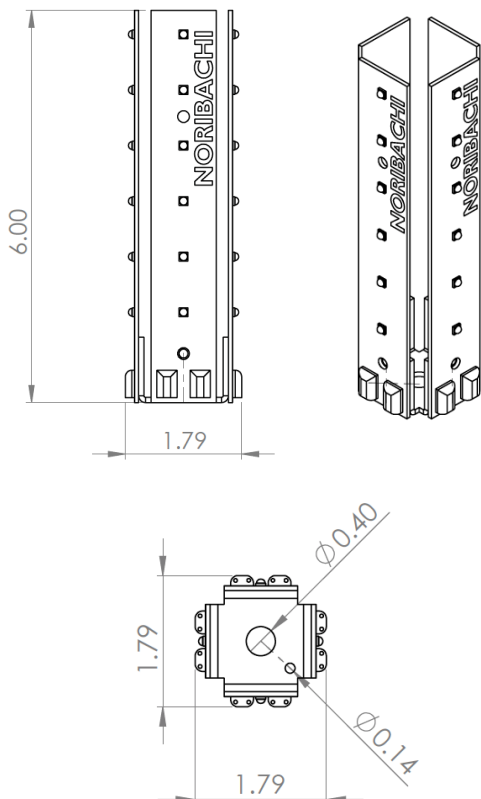
3-Month Limited Warranty. Optional 5-Year Manufacturer's Warranty Available. Full Warranty Terms Available At www.noribachi.com/products/warranty

ZIPPY-024



ZIPPY-024 is an easy retrofit for bollards or other cob-style applications.

ZIPPY-024



Product Information

Product Order Code: ZIPPY-024-CW-MT
DLC Order Code: L-C-CUS-24-REC-B-CW-MT
Common Replacement: 150W MH

The Zippy-024 retrofit kit can be used in Arealight, Bollard and Post Top lighting fixtures.

Performance Ratings and Certifications

UL 1598
UL 8750
CSA C22.2#250.0
CSA C22.2#250.13

Performance Summary

Lumens: 5,557 lumens
Lumens Per Watt (Typical): 140 LPW
Power Consumption: 40 W
Light Engine: L70 Rated Lifetime of 100,000+ hours.
CRI: Minimum 70 CRI. Custom CRI available upon request.
CCT (Typical): 3000K, 4000K, 5700K
Manufactured in the U.S. with parts from U.S. and imported.

Fixture Information

Mounting Plate: Aluminum 3003
Mounting: Universal mounting kit with 6" all-thread
Length: 6.00" not including all-thread
Width: 1.79"
Depth: 1.79"
Weight: 1.71 lbs.
Shipping Weight: 3.48 lbs.

Fits Luminaires with Internal Dimensions of

Length: 3" (minimum)
Width: 3" (minimum)
Depth: 8" (minimum)

Electrical System Characteristics / Data

AC Input: 120/277 VAC (standard), 480 VAC (upgrade)
FCC: Title 47, Part 2, Part 15, Class A
EM: Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (60% load); EN61000-3-3 Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61547, EN55024, light industry level (surge 4KV), criteria A
EM Immunity:
Withstand Voltage: I/P-O/P: 3.75KVAC I/P-FG: 2KVAC O/P - FG: 1.5KVAC
Isolation Resistance: I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC / 25 / 70% RH
Power Factor: PF > 0.98/115VAC, PF > 0.92/277VAC
Total Harmonic Distortion: THD < 20%
Standard Surge Protection: All-Around Protection: OVP, SCP, OLP.
Enhanced Surge Protection: Protects against surges according to IEEE C62.41.2 C and ANSI C136.2
Emergency Batt. Backup: Optional upgrades available.

Optional Controls:

Wireless Controls: Optional via Pulse Wireless Mesh Network
Dimming: Standard: 0-10V Optional: step, line voltage or bi-level
Daylight Harvesting Sensor: Optional
Occupancy Sensor: Optional

Warranty

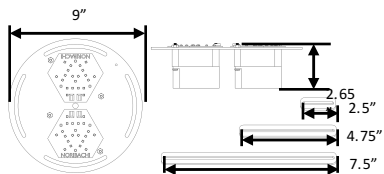
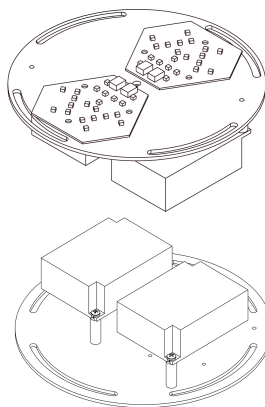
3-Month Limited Warranty. Optional 5-Year Manufacturer's Warranty Available. Full Warranty Terms Available At www.noribachi.com/products/warranty

ZIPPY-042



ZIPPY-042 is a flexible solution for a variety of indoor and low bay applications

ZIPPY-042



Product Information

Product Order Code: ZIPPY-042-CW-MT
DLC Order Code: L-C-CUS-42-REC-B-CW-MT
Common Replacement: 200W MH, 250W HPS

The Zippy-042 retrofit kit can be used in Arealight, Canopy, Cans, Cobrahead, Downlight, Floodlight, Post Top and Wallpack lighting fixtures.

Performance Ratings and Certifications

UL 1598
UL 8750
CSA C22.2#250.0
CSA C22.2#250.13

Performance Summary

Lumens: 9,724 lumens
Lumens Per Watt (Typical): 140 LPW
Power Consumption: 69 W
Light Engine: L70 Rated Lifetime of 100,000+ hours.
CRI: Minimum 70 CRI. Custom CRI available upon request.
CCT (Typical): 3000K, 4000K, 5700K
Manufactured in the U.S. with parts from U.S. and imported.

Fixture Information

Mounting Plate: Aluminum 3003
Mounting: Universal mounting kit with four 2.5" four 4.75" and four 7.5" magic tabs
Length: 9"
Width: 9"
Depth: 2.65"
Weight: 1.62 lbs.
Shipping Weight: 3.38 lbs.

Fits Luminaires with Internal Dimensions of

Length: 9" – 24"
Width: 9" – 24"
Depth: 3" (minimum)

Electrical System Characteristics / Data

AC Input: 120/277 VAC (standard), 480 VAC (upgrade)
FCC: Title 47, Part 2, Part 15, Class A
EM: Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (60% load); EN61000-3-3
EM Immunity: Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61547, EN55024, light industry level (surge 4KV), criteria A
Withstand Voltage: I/P-O/P: 3.75KVAC I/P-FG: 2KVAC O/P - FG: 1.5KVAC
Isolation Resistance: I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC / 25 / 70% RH
Power Factor: PF > 0.98/115VAC, PF > 0.92/277VAC
Total Harmonic Distortion: THD < 20%
Standard Surge Protection: All-Around Protection: OVP, SCP, OLP.
Enhanced Surge Protection: Protects against surges according to IEEE C62.41.2 C and ANSI C136.2
Emergency Batt. Backup: Optional upgrades available.

Optional Controls:

Wireless Controls: Optional via Pulse Wireless Mesh Network
Dimming: Standard: 0-10V Optional: step, line voltage or bi-level
Daylight Harvesting Sensor: Optional
Occupancy Sensor: Optional

Warranty

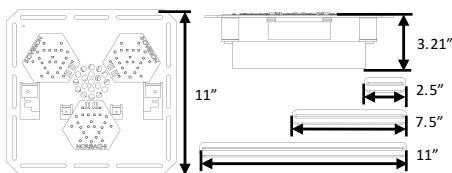
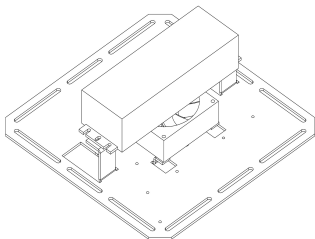
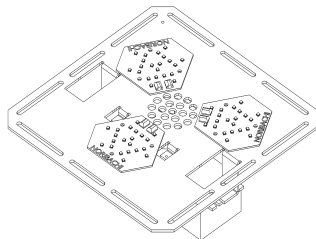
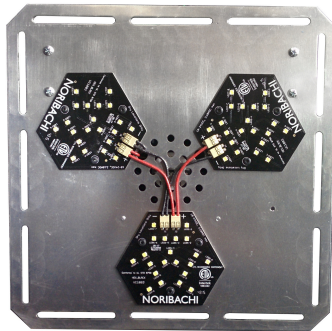
3-Month Limited Warranty. Optional 5-Year Manufacturer's Warranty Available. Full Warranty Terms Available At www.noribachi.com/products/warranty

ZIPPY-063



ZIPPY-063 can be used in near to medium distance lighting applications such as parking garages and lobbies.

ZIPPY-063



Product Information

Product Order Code:	ZIPPY-063-CW-MT
DLC Order Code:	L-C-CUS-63-REC-B-CW-MT
Common Replacement:	250 – 400W MH

The Zippy-063 retrofit kit can be used in Arealight, Canopy, Cans, Cobrahead, Downlight, Floodlight, Post Top and Wallpack lighting fixtures.

Performance Ratings and Certifications

UL 1598
UL 8750
CSA C22.2#250.0
CSA C22.2#250.13

Performance Summary

Lumens:	14,586 lumens
Lumens Per Watt (Typical):	140 LPW
Power Consumption:	104 W
Light Engine:	L70 Rated Lifetime of 100,000+ hours.
CRI:	Minimum 70 CRI. Custom CRI available upon request.
CCT (Typical):	3000K, 4000K, 5700K
Manufactured in the U.S. with parts from U.S. and imported.	

Fixture Information

Mounting Plate:	Aluminum 3003
Mounting:	Universal mounting kit with four 2.5" four 4.75" and four 11" magic tabs
Length:	11"
Width:	11"
Depth:	3.21"
Weight:	3.86 lbs.
Shipping Weight:	5.65 lbs.

Fits Luminaires with Internal Dimensions of

Length:	11.25 - 33"
Width:	11.25 - 33"
Depth:	4" (minimum)

Electrical System Characteristics / Data

AC Input:	120/277 VAC (standard), 480 VAC (upgrade)
FCC:	Title 47, Part 2, Part 15, Class A
EM:	Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (60% load); EN61000-3-3
EM Immunity:	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61547, EN55024, light industry level (surge 4KV), criteria A
Withstand Voltage:	I/P-O/P: 3.75KVAC I/P-FG: 2KVAC O/P - FG: 1.5KVAC
Isolation Resistance:	I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC / 25 / 70% RH
Power Factor:	PF > 0.98/115VAC, PF > 0.92/277VAC
Total Harmonic Distortion:	THD < 20%
Standard Surge Protection:	All-Around Protection: OVP, SCP, OLP.
Enhanced Surge Protection:	Protects against surges according to IEEE C62.41.2 C and ANSI C136.2
Emergency Batt. Backup:	Optional upgrades available.

Optional Controls:

Wireless Controls:	Optional via Pulse Wireless Mesh Network
Dimming:	Standard: 0-10V Optional: step, line voltage or bi-level
Daylight Harvesting Sensor:	Optional
Occupancy Sensor:	Optional

Warranty

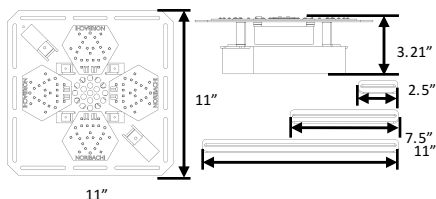
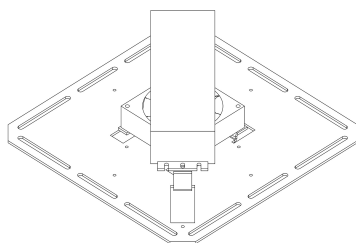
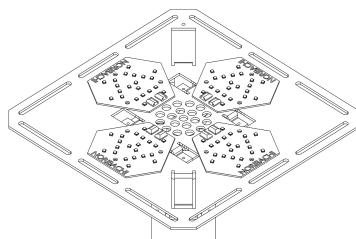
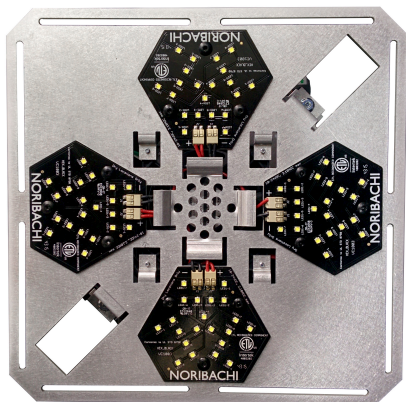
3-Month Limited Warranty. Optional 5-Year Manufacturer's Warranty Available. Full Warranty Terms Available At www.noribachi.com/products/warranty

ZIPPY-084



ZIPPY-084 is an excellent mid-power solution for larger spaces or outdoor applications.

ZIPPY-084



Product Information

Product Order Code: ZIPPY-084-CW-MT
DLC Order Code: L-C-CUS-84-REC-B-CW-MT
Common Replacement: 400 – 500W MH

The Zippy-084 retrofit kit can be used in Arealight, Canopy, Cans, Cobrahead, Downlight, Floodlight, Post Top and Wallpack lighting fixtures.

Performance Ratings and Certifications

UL 1598
UL 8750
CSA C22.2#250.0
CSA C22.2#250.13

Performance Summary

Lumens: 19,448 lumens
Lumens Per Watt (Typical): 140 LPW
Power Consumption: 139 W
Light Engine: L70 Rated Lifetime of 100,000+ hours.
CRI: Minimum 70 CRI. Custom CRI available upon request.
CCT (Typical): 3000K, 4000K, 5700K
Manufactured in the U.S. with parts from U.S. and imported.

Fixture Information

Mounting Plate: Aluminum 3003
Mounting: Universal mounting kit with four 2.5" four 7.5" and four 11" magic tabs
Length: 11"
Width: 11"
Depth: 3.21"
Weight: 3.94 lbs.
Shipping Weight: 5.74 lbs.

Fits Luminaires with Internal Dimensions of

Length: 11.25 - 33"
Width: 11.25 - 33"
Depth: 4" (minimum)

Electrical System Characteristics / Data

AC Input: 120/277 VAC (standard), 480 VAC (upgrade)
FCC: Title 47, Part 2, Part 15, Class A
EM: Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (60% load); EN61000-3-3
EM Immunity: Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61547, EN55024, light industry level (surge 4KV), criteria A
Withstand Voltage: I/P-O/P: 3.75KVAC I/P-FG: 2KVAC O/P - FG: 1.5KVAC
Isolation Resistance: I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC / 25 / 70% RH
Power Factor: PF > 0.98/115VAC, PF > 0.92/277VAC
Total Harmonic Distortion: THD < 20%
Standard Surge Protection: All-Around Protection: OVP, SCP, OLP.
Enhanced Surge Protection: Protects against surges according to IEEE C62.41.2 C and ANSI C136.2
Emergency Batt. Backup: Optional upgrades available.

Optional Controls:

Wireless Controls: Optional via Pulse Wireless Mesh Network
Dimming: Standard: 0-10V Optional: step, line voltage or bi-level
Daylight Harvesting Sensor: Optional
Occupancy Sensor: Optional

Warranty

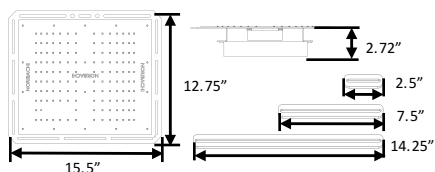
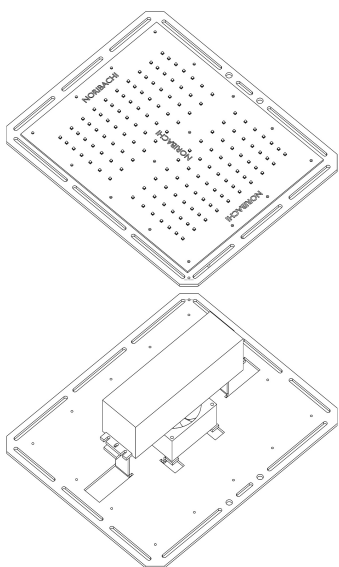
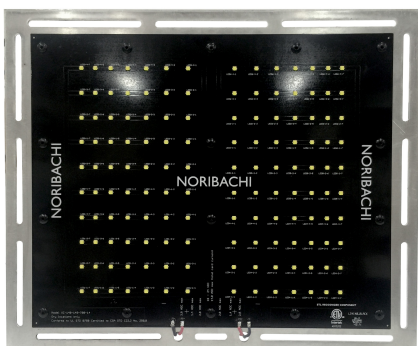
3-Month Limited Warranty. Optional 5-Year Manufacturer's Warranty Available. Full Warranty Terms Available At www.noribachi.com/products/warranty

ZIPPY-140



ZIPPY-140 is suited for larger indoor spaces, such as basketball courts; and to medium sized outdoor spaces.

ZIPPY-140



Product Information

Product Order Code: ZIPPY-140-CW-MT
DLC Order Code: L-C-CUS-140-REC-B-CW-MT
Common Replacement: 700-1000W MH

The Zippy-140 retrofit kit can be used in Arealight, Canopy, Floodlight and Post Top lighting fixtures.

Performance Ratings and Certifications

UL 1598
UL 8750
CSA C22.2#250.0
CSA C22.2#250.13

Performance Summary

Lumens: 30,870 lumens
Lumens Per Watt (Typical): 140 LPW
Power Consumption: 221 W
Light Engine: L70 Rated Lifetime of 100,000+ hours.
CRI: Minimum 70 CRI. Custom CRI available upon request.
CCT (Typical): 3000K, 4000K, 5700K
Manufactured in the U.S. with parts from U.S. and imported.

Fixture Information

Mounting Plate: Aluminum 3003
Mounting: Universal mounting kit with four 2.5", four 7.5" and four 14.25" magic tabs
Length: 12.75"
Width: 15.5"
Depth: 2.72"
Weight: 5.73 lbs.
Shipping Weight: 7.54 lbs

Fits Luminaires with Internal Dimensions of

Length: 15.75" – 42.75"
Width: 15.75" – 42.75"
Depth: 5" (minimum)

Electrical System Characteristics / Data

AC Input: 120/277 VAC (standard), 480 VAC (upgrade)
FCC: Title 47, Part 2, Part 15, Class A
EM: Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (60% load); EN61000-3-3
EM Immunity: Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61547, EN55024, light industry level (surge 4KV), criteria A
Withstand Voltage: I/P-O/P: 3.75KVAC I/P-FG: 2KVAC O/P - FG: 1.5KVAC
Isolation Resistance: I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC / 25 / 70% RH
Power Factor: PF > 0.98/115VAC, PF > 0.92/277VAC
Total Harmonic Distortion: THD < 20%
Standard Surge Protection: All-Around Protection: OVP, SCP, OLP.
Enhanced Surge Protection: Protects against surges according to IEEE C62.41.2 C and ANSI C136.2
Emergency Batt. Backup: Optional upgrades available.

Optional Controls:

Wireless Controls: Optional via Pulse Wireless Mesh Network
Dimming: Standard: 0-10V Optional: step, line voltage or bi-level
Daylight Harvesting Sensor: Optional
Occupancy Sensor: Optional

Warranty

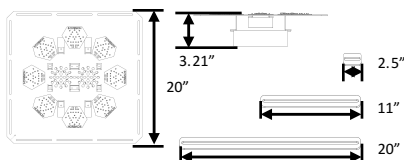
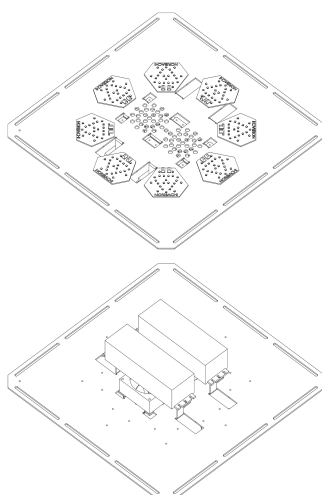
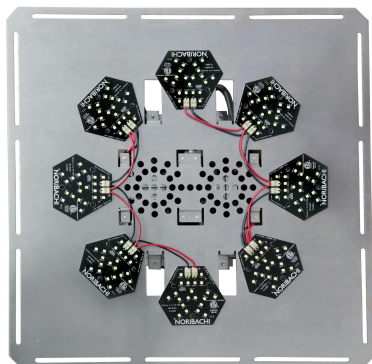
3-Month Limited Warranty. Optional 5-Year Manufacturer's Warranty Available. Full Warranty Terms Available At www.noribachi.com/products/warranty

ZIPPY-168



ZIPPY-168 is ideal for large scale applications, such as manufacturing floors and distribution centers.

ZIPPY-168



Product Information

Product Order Code: ZIPPY-168-CW-MT
DLC Order Code: L-C-CUS-168-REC-B-CW-MT
Common Replacement: 750 - 1250W MH

The Zippy-168 retrofit kit can be used in Arealight, Floodlight and Post Top lighting fixtures.

Performance Ratings and Certifications

UL 1598
UL 8750
CSA C22.2#250.0
CSA C22.2#250.13

Performance Summary

Lumens: 37,970 lumens
Lumens Per Watt (Typical): 140 LPW
Power Consumption: 271 W
Light Engine: L70 Rated Lifetime of 100,000+ hours.
CRI: Minimum 70 CRI. Custom CRI available upon request.
CCT (Typical): 3000K, 4000K, 5700K
Manufactured in the U.S. with parts from U.S. and imported.

Fixture Information

Mounting Plate: Aluminum 3003
Mounting: Universal mounting kit with four 2.5", four 11" and four 20" magic tabs
Length: 20"
Width: 20"
Depth: 3.21"
Weight: 8.72 lbs.
Shipping Weight: 11.91 lbs.

Fits Luminaires with Internal Dimensions of

Length: 20" - 60"
Width: 20" - 60"
Depth: 5" (minimum)

Electrical System Characteristics / Data

AC Input: 120/277 VAC (standard), 480 VAC (upgrade)
FCC: Title 47, Part 2, Part 15, Class A
EM: Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (60% load); EN61000-3-3
EM Immunity: Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61547, EN55024, light industry level (surge 4KV), criteria A
Withstand Voltage: I/P-O/P: 3.75KVAC I/P-FG: 2KVAC O/P - FG: 1.5KVAC
Isolation Resistance: I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC / 25 / 70% RH
Power Factor: PF > 0.98/115VAC, PF > 0.92/277VAC
Total Harmonic Distortion: THD < 20%
Standard Surge Protection: All-Around Protection: OVP, SCP, OLP.
Enhanced Surge Protection: Protects against surges according to IEEE C62.41.2 C and ANSI C136.2
Emergency Batt. Backup: Optional upgrades available.

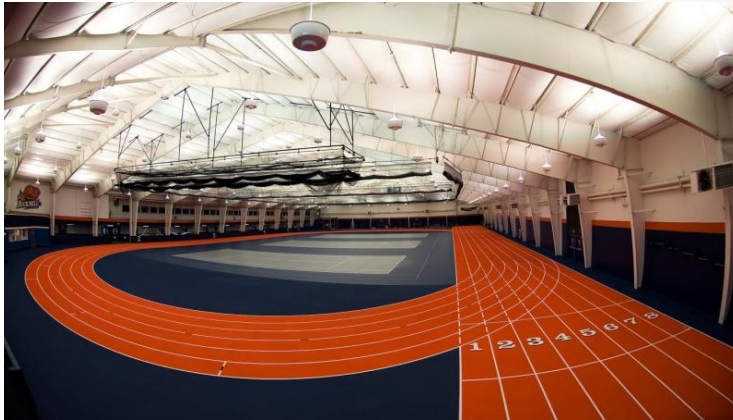
Optional Controls:

Wireless Controls: Optional via Pulse Wireless Mesh Network
Dimming: Standard: 0-10V Optional: step, line voltage or bi-level
Daylight Harvesting Sensor: Optional
Occupancy Sensor: Optional

Warranty

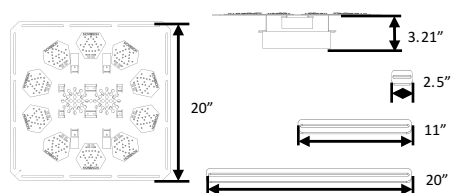
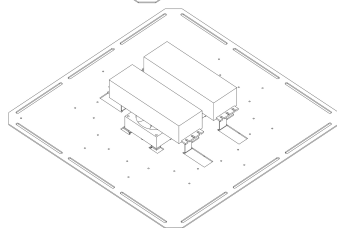
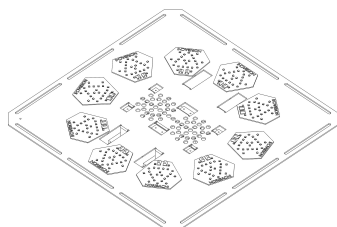
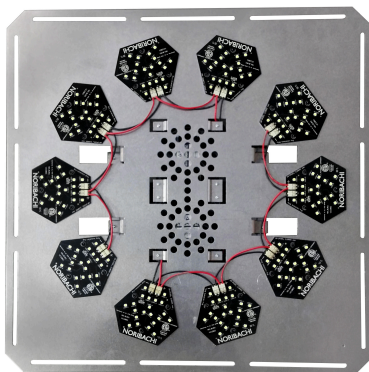
3-Month Limited Warranty. Optional 5-Year Manufacturer's Warranty Available. Full Warranty Terms Available At www.noribachi.com/products/warranty

ZIPPY-210



ZIPPY-210 is our largest Zippy Kit! Puts out enough light to retrofit athletic fields and other large venues.

ZIPPY-210



Product Information

Product Order Code: ZIPPY-210-CW-MT
DLC Order Code: L-C-CUS-210-REC-B-CW-MT
Common Replacement: 1000 – 1500W MH

The Zippy-210 retrofit kit can be used in Arealight, Floodlight and Post Top lighting fixtures.

Performance Ratings and Certifications

UL 1598
UL 8750
CSA C22.2#250.0
CSA C22.2#250.13

Performance Summary

Lumens: 47,463 lumens
Lumens Per Watt (Typical): 140 LPW
Power Consumption: 339 W
Light Engine: L70 Rated Lifetime of 100,000+ hours.
CRI: Minimum 70 CRI. Custom CRI available upon request.
CCT (Typical): 3000K, 4000K, 5700K
Manufactured in the U.S. with parts from U.S. and imported.

Fixture Information

Mounting Plate: Aluminum 3003
Mounting: Universal mounting kit with four 2.5", four 11" and four 20" magic tabs
Length: 20"
Width: 20"
Depth: 3.21"
Weight: 8.77 lbs.
Shipping Weight: 11.95 lbs.

Fits Luminaires with Internal Dimensions of

Length: 20" - 60"
Width: 20" - 60"
Depth: 5" (minimum)

Electrical System Characteristics / Data

AC Input: 120/277 VAC (standard), 480 VAC (upgrade)
FCC: Title 47, Part 2, Part 15, Class A
EM: Compliance to EN55015, EN55022 (CISPR22) Class B, EN61000-3-2 Class C (60% load); EN61000-3-3
EM Immunity: Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11, EN61547, EN55024, light industry level (surge 4KV), criteria A
Withstand Voltage: I/P-O/P: 3.75KVAC I/P-FG: 2KVAC O/P - FG: 1.5KVAC
Isolation Resistance: I/P-O/P, I/P-FG, O/P-FG: 100M Ohms / 500VDC / 25 / 70% RH
Power Factor: PF > 0.98/115VAC, PF > 0.92/277VAC
Total Harmonic Distortion: THD < 20%
Standard Surge Protection: All-Around Protection: OVP, SCP, OLP.
Enhanced Surge Protection: Protects against surges according to IEEE C62.41.2 C and ANSI C136.2
Emergency Batt. Backup: Optional upgrades available.

Optional Controls:

Wireless Controls: Optional via Pulse Wireless Mesh Network
Dimming: Standard: 0-10V Optional: step, line voltage or bi-level
Daylight Harvesting Sensor: Optional
Occupancy Sensor: Optional

Warranty

3-Month Limited Warranty. Optional 5-Year Manufacturer's Warranty Available. Full Warranty Terms Available At www.noribachi.com/products/warranty

Optics Specifications

White LED Optics

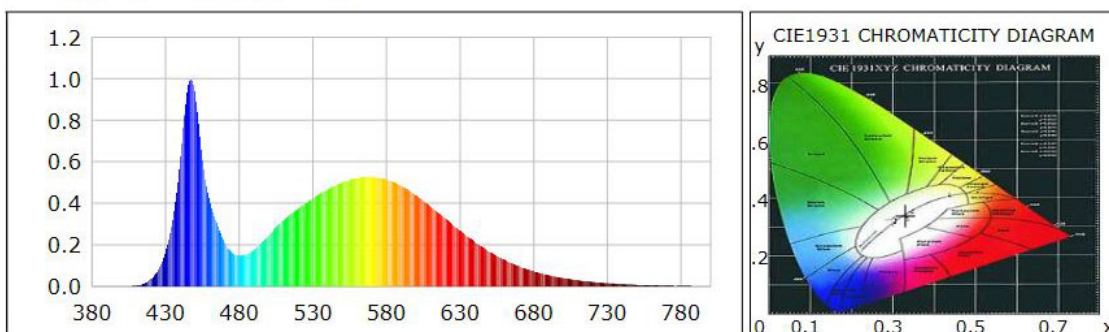
High brightness, high efficiency LEDs. Standard color temperature is Cool White (5700K typical). Neutral White (4000K typical) and Warm White (3000K typical) also available. All with minimum 70 CRI. Tight bins (<+/- 50degK variability) also available – recommended for VVV installations as the eye is sensitive to variations in this color range. 40deg and 80deg beam angle optional (n/a for RGBW).

RGBW Light Engine Optics

RGBW light engine also available, compatible with DMX controller. RGBW colors, to allow changing from pure white light to any hue available. Multiple channels of LEDs produce a full spectrum of light anywhere from deepest red to farthest violet. CRI great than 75 in the 2700K – 4000K range.

Single color light engines also available. Red=630 nanometers, Green=525 nanometers. Blue=475 nanometers.

Photometric Data for White LED Light Engine



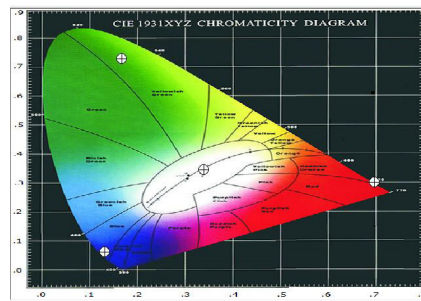
Chromaticity coordinates: $x=0.3305$ $y=0.3424$ $u(u')=0.2050$ $v=0.3186$ $v'=0.4779$
 CCT: $T_c=5700K$ ($duv=0.00156$) Color Ratio: $R=0.133$ $G=0.827$ $B=0.040$
 Peak Wavelength: 447.2nm Half Bandwidth: 19.1nm
 Dominant Wavelength: 535.2nm Color Purity: 0.020
 Color Render Index: $R_a=75.0$, $avgR(1\sim14)=65.6$, $avgR(1\sim15)=65.9$

R1 =74	R2 =76	R3 =76	R4 =81	R5 =75	R6 =66	R7 =84	R8 =67
R9 =0	R10=41	R11=78	R12=40	R13=73	R14=86	R15=71	

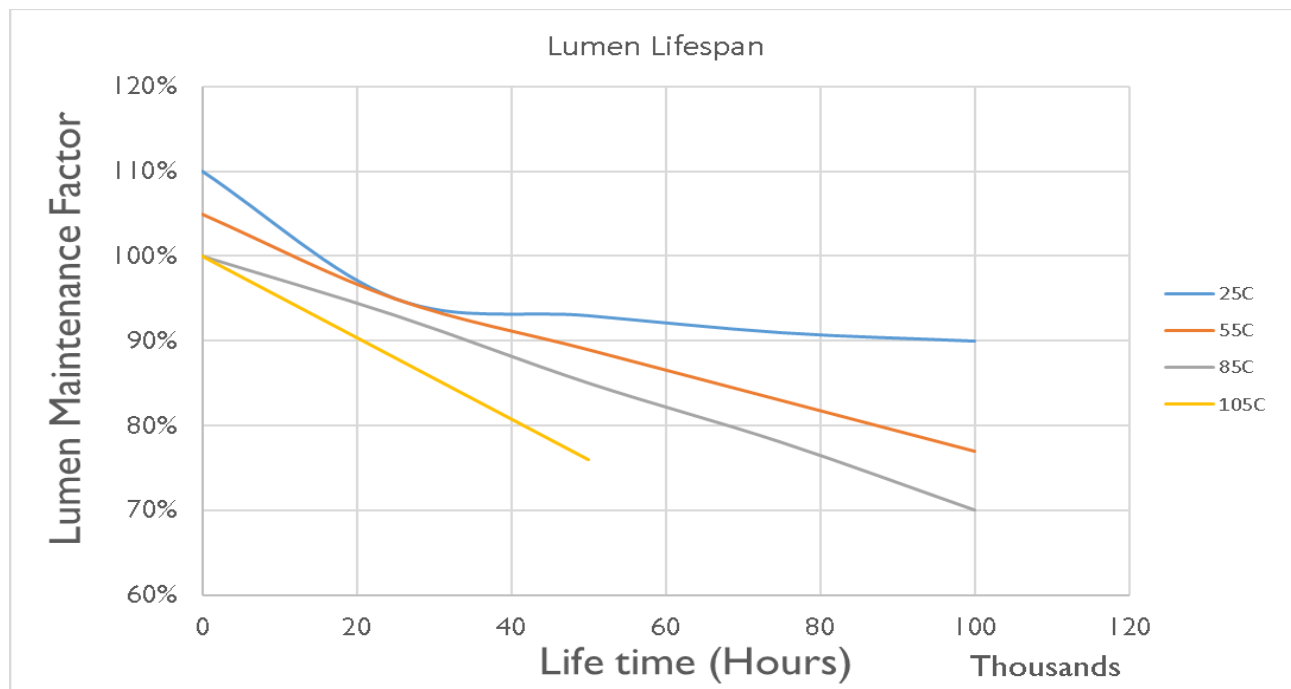
Photometric Data for RGBW LED Light Engine

Chromaticity coordinates:

White $x=0.3405$, $y=0.3459$
 Green $x=0.1687$, $y=0.7296$
 Red $x=0.6968$, $y=0.3024$
 Blue $x=0.1316$, $y=0.0636$



Lumen Performance



Lumen Maintenance Factors (B Drive)					
T _j (Junction Temp)	INITIAL LMF	25K HR PROJECTED LMF	50K HR PROJECTED LMF	75K HR PROJECTED LMF	100K HR PROJECTED LMF
25°C	1.10	0.95	0.93	0.91	0.90
55°C	1.05	0.95	0.89	0.83	0.77
85°C	1.00	0.93	0.85	0.78	0.70
105°C	1.00	0.88	0.76	N/A	N/A

Each temperature has an independent initial value. In accordance with IESNA TM021011, Projected Values represent interpolated value based on time durations that are within six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip). In accordance with IESNA TM-21-11, Calculated Values represent time durations that exceed six times (6X) the IESNA LM-80-08 total test duration (in hours) for the device under testing (DUT) i.e. the packaged LED chip).

Lumen Multiplier	
AMBIENT TEMPERATURE	LUMEN MULTIPLIER
10°C	1.032
15°C	1.021
25°C	1.000
40°C	0.968
50°C	0.946

Electrical System Specifications

Electrical System

Standard AC input of 120 – 277VAC. Optional upgrade to 480VAC. Driver meets maximum harmonic distortion (THD) of 20% and is ROHS compliant. Power Factor = > 0.9. Standard Surge protection according to IEC/EN 61000-4-5 EMC test standard and can protect against up to 4KV transient surge. Optional, enhanced Surge Protection protects Line-Ground, Line-Neutral, and Neutral-Ground. Protects against surges according to IEEE C62.41.2 C(10kA and 10kV) and ANSI C136.2.

Controls

Optional controls include: 0-10V (010V), Step, line voltage and Bi-Level Dimming functionality (not guaranteed to work with all dimming systems). Occupancy and Daylight Harvest Sensors available. Optional Emergency Battery Backup: Nickel-Cadmium Batteries, 5W, 600 Lumens for 90 minutes. Optional Cold Emergency Battery Backup: 23W, 2000 Lumens for 90 minutes. The battery has a 7-10 year lifespan.

Driver

All LED drivers provide constant current to give flicker free lighting. Two different drive currents are provided; A (350 mA) and B (525 mA). Highly reliable. Suitable for dry, damp and wet locations. Compliant to worldwide safety regulations for lighting.

Ambient Temperature

We provide fixtures that can sustain ambient temperature ranging from -40F to 140F (-40C to 60C).

Wireless Control Options

Optional wireless networking using the Noribachi Pulse Wireless controller. Pulse is an Arduino-based hardware platform that provides communication between fixtures and a base station using Digi's XBEE based mesh network. Pulse controls up to 16 independent LED lighting fixtures using an FCC approved 900 MHz frequency with up to 200 Kbps data transmission speed. Transmit power output 50 mW. Data transmission rate is 156.25 kbps. 128 bit AES Encryption.

Occupancy Sensor and Daylight Harvesting

Sensor provides 60' diameter coverage from a 40' height. Time can be set from 30 seconds to 30 minutes.

RGBW Controls

Optional RGBW controls with communication to fixture via DMX512 or DMX256 and four channel controls. Four channel control uses red, green, blue and white (to control intensity). DMX controller optional, either software DMX master (via CD and USB adapter) or a physical DMX master. 2.4 GHz wireless DMX networking optional. Other frequencies available upon request.

Testing Compliance

Noribachi complies with and exceeds standards set forth by UL and CSA. All luminaires comply with UL 1598 (CSA C22.2#250.13), and UL 8750 (CSA C22.2#250.0) standards for safety.

Performance testing is done in accordance with LM-79 color measurements and LM-79 distribution measurements, and LM-80 lumen maintenance testing.

Manufacturing

Manufactured in beautiful Harbor City, CA. ARRA Compliant. NAFTA Compliant. Test and burn-in of 100% of all luminaires before shipment. No less than 8-years experience in manufacturing LED-based products.

Warranty

Standard limited 3-month warranty, first year includes labor. Optional 5-year warranty available. See details at www.Noribachi.com.

Note

All safety tests and performance data is done in ambient (STP) conditions. Specifications subject to change without notice. Actual performance may differ as a result of end-user environment application. Actual wattage may differ by +/- 8%. Lumen values may vary within compliance with ANSI C78-377 (unless specifying tight color bins).

Ordering

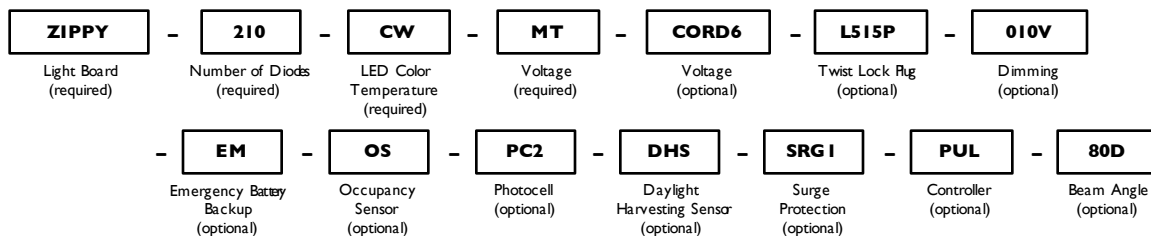
In stock and ready to ship in 72 hours!

Electrical System Specifications

Order Code	Common Replacements for:			Lumens	Lumens per Watt	Input Power (W)	Replaces
	(Amps@ 120V)	(Amps@ 277V)	(Amps@ 480V)				
ZIPPY-021	0.29	0.13	0.07	4,862	140	35	100-150W
ZIPPY-024	0.33	0.14	0.08	5,557	140	40	90-185W
ZIPPY-042	0.58	0.25	0.14	9,724	140	69	200-250W
ZIPPY-063	0.87	0.38	0.22	14,586	140	104	250-400W
ZIPPY-084	1.16	0.50	0.29	19,448	140	139	400-500W
ZIPPY-140	1.84	0.80	0.46	30,870	140	221	700-1000W
ZIPPY-168	2.26	0.98	0.57	37,970	140	271	750-1250W
ZIPPY-210	2.83	1.22	0.71	47,463	140	339	1000-1500W

How to Order

Sample Order Code: Only include the optional upgrades you need.



For Rebates, use DLC order code. **Ex: L-C-CUS-210-REC-B-CW-MT**

Numbering Order	Specification	Required or Optional	Allowed Values	Description
1	Light Board	Required	ZIPPY	For all
2	Number of Diodes	Required	021	For ZIPPY-021
			024	For ZIPPY-024
			042	For ZIPPY-042
			063	For ZIPPY-063
			084	For ZIPPY-084
			140	For ZIPPY-140
			168	For ZIPPY-168
3	LED Color Temperature	Required	210	For ZIPPY-210
			CW	Standard Cool White LEDs (5700K)
			NW	Neutral White LEDs (4000K)
			WW	Warm White LEDs (3000K)
			[Specific degree Kelvin]	Specific color temp LEDs [Specific degree Kelvin]
			TB1 [Specific degree Kelvin]	Tight Bin LED Color [Specific degree Kelvin] for < 150W
			TB2 [Specific degree Kelvin]	Tight Bin LED Color [Specific degree Kelvin] for > 150W
4	Voltage	Required	RGBW*	Red/Green/Blue/White light engine
			SC [R, G, B]*	Red, Green, or Blue light engine
			MT	Standard AC input 120VAC - 277VAC
			HV1	High Voltage (480VAC) option for up to 150W
			HV2	High Voltage (480VAC) option for greater than 150W
5	Cord	Optional	CORD6	6' 16/3 STW Cord
			CORD10	10' 16/3 STW Cord
6	Twist Lock Plug	Optional	L515P	L515P 125V Twist Lock Plug
			L615P	L615P 250V Twist Lock Plug
			L715P	L715P 277V Twist Lock Plug
			L720P	L720P 277V Twist Lock Plug
			L820P	L820P 480V Twist Lock Plug
			L830P	L830P 480V Twist Lock Plug
7	Dimming	Optional	010V	0 - 10V dimming
			STEP	Step dimming
			LVDIM	Line Voltage dimming
			BLD	Bi-level dimming
8	Emergency Battery Backup	Optional	EM	Emergency Battery Backup
			EMC	Emergency Battery Backup - Cold
9	Occupancy Sensor	Optional	OS	Occupancy Sensor
10	Photocell	Optional	PC1	Photocell for 120V applications
			PC2	Photocell for 277V applications
11	Daylight Harvesting Sensor	Optional	DHS	Daylight Harvesting Sensor
12	Surge Protection	Optional	SRG1	Enhanced Surge Protection 120-277VAC
			SRG2	Enhance Surge Protection 480VAC
13	Controller	Optional	PUL	Pulse Wireless Controller
14	Beam Angle	Optional	80D	80degree beam angle optics
			40D	40degree beam angle optics (n/a for ZIPPY-024 and ZIPPY-140)

*Lead time will be greater than 72 hours

Additional Options

Specification	Required or Optional	Allowed Values	Description
LED CLU*	Optional	06	CLU-LIN
		021	CLU-HEX
		140	CLU-SQUARE
LED DRIVER*	Optional	25	DRIVE-25
		40	DRIVE-40
		67	DRIVE-67
		100	DRIVE-100
		150	DRIVE-150
		240	DRIVE-240
		*These items are not on the DLC QPL	

