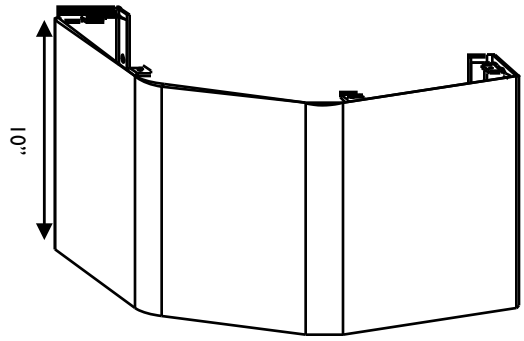
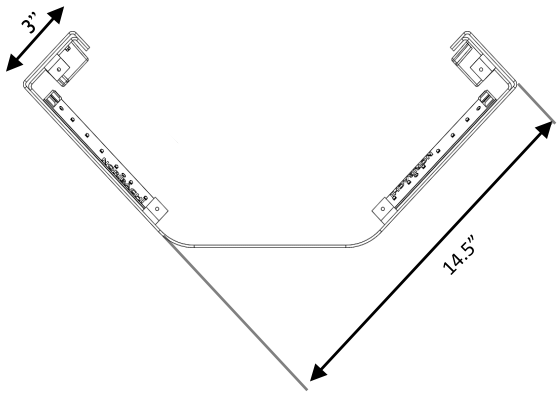
WALL SCONCE.OC

NORIBACHI





Product Information
The Wall Sconce.OC is a flexible and energy-efficient LED lighting fixture.

This LED lighting fixture features aluminum housing with durable white powdercoat with clear coat.

Applications: Conference Rooms, Hallways, Recreational Facilities and a variety of other indoor lighting applications.

Performance Ratings and Certifications
UL 1598
UL 8750
CSA C22.2#250.0
CSA C22.2#250.13

Performance Summary

Lumens:	3,704 – 5,557 lm
Lumens Per Watt (typ.):	140 LPW
Power Consumption:	26.5 – 40 W
Light Engine:	L70 Rated Lifetime of 100,000+ hours.
CRI:	Minimum 80 CRI. Custom CRI also available.
CCT (Typical):	3000K, 4000K, 5700K, tight bins also available.

Manufactured in the U.S. with parts from U.S. and imported.

Fixture Information

Housing:	Aluminum
Color:	Durable white powdercoat with clear coat. Optional custom color.
Finish:	Superior dual coat finish.
Lens:	Polycarbonate lens
Mounting:	Wall mount
Length:	14.5”
Width:	3”
Height:	Available in 5” or 10” heights

Electrical System Characteristics / Data

AC Input:	120/277 VAC (standard)
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

Optional Controls:

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

Warranty
Five-Year Limited Warranty. Optional 10-Year Manufacturer’s Warranty Available. Full Warranty Terms Available At www.noribachi.com/products/warranty

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Performance Specifications

Electrical Load				
Light Engine	Drive Current (Amps@120VAC)	Drive Current (Amps@277VAC)	Drive Current (Amps@480VAC)	System Power (Watts)*
LIN-024-A-NW-MT	0.22	0.10	N/A	26.50
LIN-024-B-NW-MT	0.33	0.14	N/A	39.70
				* ideal wattage

Operating Characteristics (Typical @4000K CCT)			
Light Engine	Lumens (Medium Dist)	Input Power (Watts)	Lumens per Watt
LIN-024-A-NW-MT	3,704	26.50	140
LIN-024-B-NW-MT	5,557	39.70	140

Electrical System Specifications

Electrical System
Standard AC input of 120 – 277VAC. 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 luminaries before shipment. No less than 8-years experience in manufacturing LED-based products.

Warranty
Standard limited 5-year warranty, first year includes labor. Optional 10-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).

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Optics Specifications for 140 LPW lighting

White LED Optics

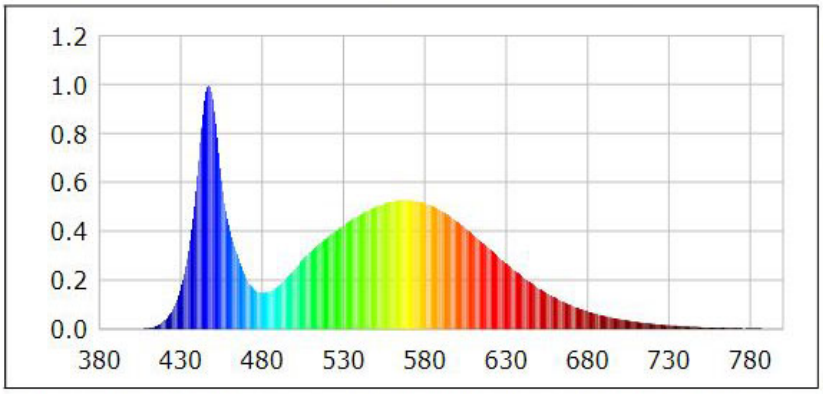
High brightness, high efficiency LEDs. Standard color temperature is Cool White (5000K typical). Neutral White (4000K typical) and Warm White (3000K typical) also available. All with minimum 70 CRI. Tight bins (<+/-50degK variability) also available – recommended for WW installations as the eye is sensitive to variations in this color range. 40deg and 80deg beam angle optional (n/a for RGBW).

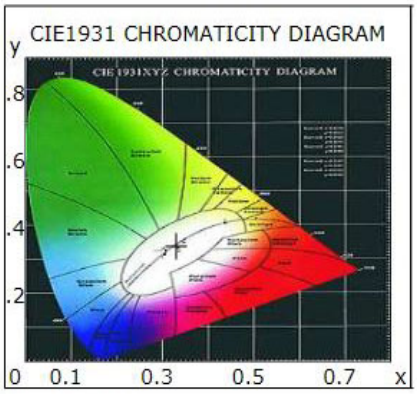
RGBW Light Engine Optics

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 greater 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



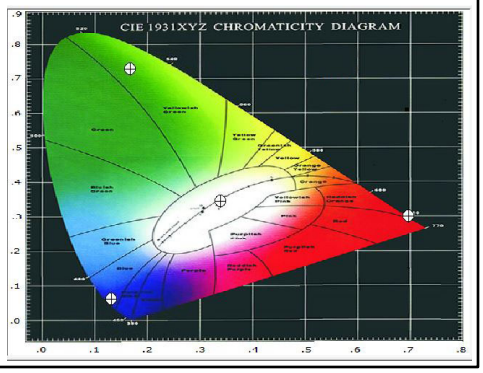


Chromaticity coordinates: x=0.3305 y=0.3424 u(u')=0.2050 v=0.3186 v'=0.4779
CCT: Tc=5700K (duv=0.00156) Color Ratio: R=0.133 G=0.827 B=0.040
Peak Wavelength: 447.2nm Half Bandwidth: 19.1nm
Dominant Wavelength: 535.2nm Color Purity: 0.020
Color Render Index: Ra= 75.0, avgR(1~14)= 65.6, avgR(1~15)= 65.9

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



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Available Light Engines

Fixture	Standard Order Code	Lumens	Watts	Voltage	Color Temp
WS.OC	WSOC-LIN-024-A-NW-MT	3,704	27	120 - 277VAC	4000K (neutral white)
	WSOC-LIN-024-B-NW-MT	5,557	40	120 - 277VAC	4000K (neutral white)

How to Order

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

WSOC	–	LIN	–	24	–	B	–	SC [G]	–	MT	–	COL-5004	–	EPOXY	–
Fixture (required)		Light Board (required)		Number of Diodes (required)		Drive Current (required)		LED Color Temperature (required)		Voltage (required)		Custom Fixture Color (optional)		Coating (optional)	

LENS	–	BLD[50]	–	OS	–	PCI	–	DHS	–	SRG1	–	PUL
Lens (optional)		Dimming (optional)		Occupancy Sensor (optional)		Photocell (optional)		Daylight Harvesting Sensor (optional)		Surge Protection (optional)		Controller (optional)

How to Order (continued)

Numbering Order	Specification	Required or Optional	Allowed Values	Description
1	Fixture	Required	WSOC	For Wall Sconce.Outside Corner
2	Light Board	Required	LIN	For WSOC
3	Number of Diodes	Required	24	For all
4	Drive Current	Required	A	A (350mA) drive current
			B	B (525mA) drive current
5	LED Color Temperature	Required	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]
			TB2 [Specific degree Kelvin]	Tight Bin LED Color [Specific degree Kelvin] for all others
			RGBW	Red/Green/Blue/White light engine
			SC [R, G, B]	Red, Green, or Blue light engine
6	Voltage	Required	MT	Standard AC input: 120VAC - 277VAC
7	Custom Fixture Color	Optional	COL-[RAL]	Custom Fixture Color (RAL code)
8	Coating	Optional	EPOXY	Epoxy Coating
9	Lens	Optional	Lens	Polymetric Lens
10	Dimming	Optional	010V	0 - 10V dimming
			STEP	Step dimming
			LVDIM	Line voltage dimming
			BLD[%]	Bi-level dimming
11	Occupancy Sensor	Optional	OS	Occupancy Sensor
12	Photocell	Optional	PC1	Photocell for 120V applications
			PC2	Photocell for 277V applications
13	Daylight Harvesting Sensor	Optional	DHS	Daylight Harvesting Sensor
14	Surge Protection	Optional	SRG1	Enhanced surge protection for 120-277VAC
			SRG2	Enhanced surge protection for 480VAC
15	Controller	Optional	PUL	Pulse Wireless Controller