**ENDURA SERIES** 

SURFACE/CEILING/GARAGE

Cat.#	
Job	Type



**Approvals** 

## **SPECIFICATIONS**

### Intended Use:

The Endura is a ceiling surface mounted or pendant mounted parking structure luminaire with a field replaceable LED light-engine & optical bezel system. Internal components are totally enclosed in a rain-tight and corrosion-resistant die cast aluminum housing. The Endura Luminaire is CSA listed and suitable for damp locations (wet location available on request).

### Construction:

- Die cast aluminum two-piece housing
- Shape of the top housing is designed as a bird nesting deterrent
- Die cast main (thermal) housing provides direct-heat exchange between the LED light engine and the cool outdoor air by drawing heat through integral heat channels and out to the sculptured and functional luminaire surface.
- LED drivers are thermally isolated from the main housing, mechanically attached and heat-sinked to the top housing.
- · Main housing is designed with heat dissipating fins for LED thermal management without the use of metallic screens, cages, or fans
- Main and top housings are designed to hinge open for easy mounting and easy access

### LED/Optics:

- Endura luminaire is supplied with an Optical one piece cartridge system consisting of an LED engine, LED lamps, optics, gasket and stainless steel bezel
- Cartridge is held together with internal brass standoffs soldered to the board so that it can be field replaced as a one piece optical system.
- Two-piece silicone and polycarbonate foam gasket ensures a weather-proof seal around each individual LED and allows the Endura luminaire to be rated for high-pressure hose down applications.
- Optical cartridge is secured to the extruded housing with fasteners and a heat pad to ensure thermal conductivity. The optics are held in place without the use of adhesives and the complete assemble is gasketed for high pressure hose down cleaning.
- Cartridge assembly is available in various lighting distributions using TIR designed Acrylic optical lenses over each LED.

### **Electrical:**

- 120V through 277V, 50 Hz to 60 Hz.
- Endura comes standard with 70 CRI. • Power factor is min 0.92 at full load.
- All electrical components are rated at 50,000 hours at full load and 40°C ambient conditions per MIL-217F Notice 2.
- Optional 0 to 10 volt dimming drivers are available upon request.
- Component-to-component wiring within the luminaire may carry no more than 80% of rated load and is listed by UL for use at 600VAC at 50°C or higher.
- · Plug disconnects are listed by UL for use at 600 VAC, 15A or higher. 15A rating applies to primary (AC) side only.

### Controls/Options:

- · Endura is available with an optional passive infrared (PIR) motion sensor capable of detecting motion 360° around the luminaire. When no motion is detected for the specified time, the Motion Response system reduces the wattage down to a factory preset level, reducing light level accordingly. When motion is detected, the luminaire returns to full wattage and full light output. Please contact Beacon Products if project requirements vary from the standard configurations.
- Available with Energeni for optional set dimming with simple delay, or timed dimming based on hours of operation or time of night (see Energeni product page for more details www.beaconproducts.com/products/energeni)
- Also available with Beaconnect Wireless Control System (see Beaconnect product page for more details www. beaconproducts.com/products/beaconnect)

### Installation:

- Top housing is designed with various bolt patterns for mounting to a recessed surface or rigid-pendant hung 4" junction box and rigid stem provided by others)
- After mounting the top housing to the junction box, the main housing is designed to hang and hinge closed after connecting the male and female quick connectors
- Mounting design permits a simple retrofit to existing parking structure luminaires that utilize surface mount or recessed junction boxes

### Finish:

- Beacote V polyester powder-coat electrostatically applied and thermocured.
- Beacote V finish consists of a five stage iron phosphate chemical pretreatment regimen with a polymer primer sealer, ovendry off, and top coated with a thermoset super TGIC polyester powder coat finish.
- The finish meets the AAMA 605.2 performance specification which includes passing a 3000 hour salt spray test for corrosion resistance and resists cracking or loss of adhesion per ASTM D522 and resists surface impacts of up to 160 inch-pounds.

The luminaire shall bear a CSA label and be marked suitable for damp locations (standard). Luminaire may be specified for wet locations.

### Warrantv:

Five year limited warranty (for more information visit: http://www.hubbelllighting.com/resources/ warranty).

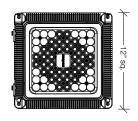
## PRODUCT IMAGE(S)



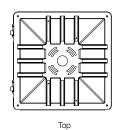


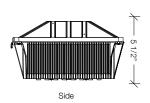


## **DIMENSIONS**



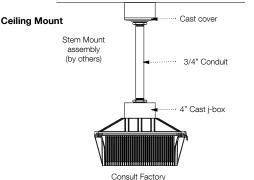
Bottom







Isometric

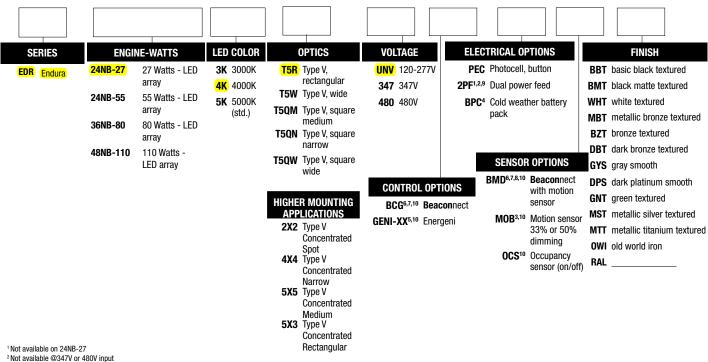


## **CERTIFICATIONS/LISTINGS**









436NB-80 only

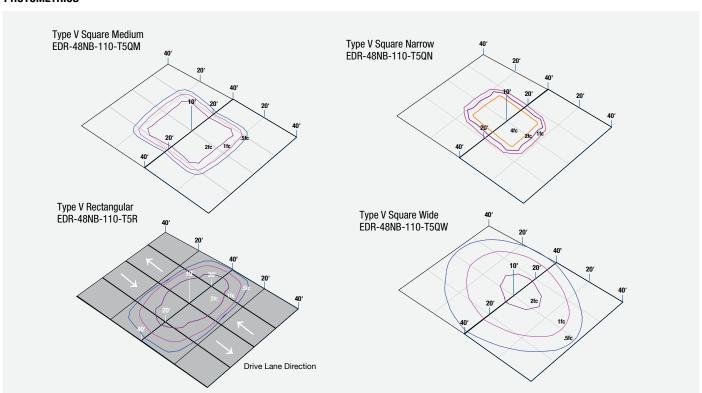
<sup>5</sup>When ordering Energeni, specify the routine setting code (example GENI-04). See Energeni brochure and instructions for setting table and options. Not available with sensor options. <sup>6</sup> Specify group and zone. See **Beacon**nect product page for more details.

<sup>7</sup>Must use **Beacon**nect with motion sensor. See **Beacon**nect product page for more details.

9 Not available with BCG option

BEACONNECT ORDERING INFORMATION: When ordering a fixture with the Beaconnect lighting control options please specify the appropriate group and sensor information. Please provide dimming schedule information in either the Beaconnect excel spreadsheet or Beaconnect software. For more detailed information please visit www. beaconproducts.com/beaconnect or contact beacon tech support at (800) 345-4928. These settings are specified in the ordering as shown in the example below. (Family) / 24NB-55 / 5K/T3 / UNV / BCG-(Group 1-16)\_\_\_\_\_\_\_-(Optional Zone 1-250)\_/BMD - \_\_Time Delay(1 to 255)\_ - \_\_\_Dimming% (1 to 100)\_ - \_\_mounting height(1-20ft)\_\_/ Example: EDR/24NB-55/5K/T3/UNV/BCG-G1 /BMD-30M-50%-10F/DBT for luminaires without sensors in the group omit the BMD ordering logic Example: EDR/24NB-55/5K/T3/UNV/BCG-G1 /DBT

# **PHOTOMETRICS**







<sup>3</sup> Not available on 48NB-110

Specify time delay; dimming level and mounting height.

<sup>10</sup> Not available with other control or sensor options

				5K (5000K nominal, 70 CRI)				4K					3K					
							(4000K nominal, 70 CRI)					(3000K nominal, 80 CRI)						
# LED'S	DRIVE CURRENT (MILLIAMPS)	SYSTEM WATTS	DISTRIBUTION TYPE	LUMENS	LPW <sup>1</sup>	В	U	G	LUMENS	LPW <sup>1</sup>	В	U	G	LUMENS	LPW <sup>1</sup>	В	U	G
	( <i>)</i>		T5R	3142	116	2	0	2	3111	115	2	0	2	2670	99	2	0	2
			T5W	3044	113	2	0	1	3014	112	2	0	1	2600	96	2	0	1
			T5QN	3005	111	2	0	0	2976	110	2	0	0	2555	95	1	0	0
			T5QM	3085	114	2	0	0	3055	113	2	0	0	2623	97	1	0	0
24	350mA	27W	T5QW	2764	102	2	0	1	2737	101	2	0	1	2350	87	2	0	1
			2X2	3287	122	3	0	1	3254	121	3	0	1	2794	103	3	0	1
			4X4	3242	120	3	0	0	3210	119	3	0	0	2756	102	3	0	0
			5X3	2832	105	2	0	1	2803	104	2	0	1	2407	89	2	0	0
			5X5	3031	112	2	0	1	3001	111	2	0	1	2577	95	2	0	1
			T5R	6283	113	3	0	3	6221	111	3	0	3	5341	96	3	0	3
			T5W	6087	109	3	0	1	6027	108	3	0	1	5201	93	3	0	1
			T5QN	6011	109	2	0	0	5951	108	2	0	0	5110	93	2	0	0
24		55 W	T5QM	6171	111	3	0	1	6110	109	3	0	1	5245	94	2	0	1
			T5QW	5528	101	3	0	2	5473	100	3	0	2	4699	85	3	0	2
			2X2	6573	118	4	0	1	6508	117	4	0	1	5587	100	4	0	1
			4X4	6485	118	4	0	0	6420	117	4	0	0	5512	100	3	0	0
			5X3	5663	103	3	0	1	5607	102	3	0	1	4814	88	3	0	1
			5X5	6063	110	3	0	1	6002	109	3	0	1	5153	94	3	0	1
			T5R	9425	112	3	0	3	9331	111	3	0	3	8011	96	3	0	3
			T5W	9131	109	3	0	2	9040	108	3	0	2	7801	93	3	0	2
			T5QN	9017	108	3	0	0	8927	107	3	0	0	7664	92	3	0	C
			T5QM	9256	110	3	0	1	9164	109	3	0	1	7868	94	3	0	1
36	700 mA	80 W	T5QW	8292	101	3	0	3	8209	100	3	0	3	7048	86	3	0	3
	''		2X2	9860	118	4	0	1	9762	116	4	0	1	8381	100	4	0	1
			4X4	9727	116	4	0	1	9630	115	4	0	1	8268	99	4	0	1
			5X3	8495	102	3	0	1	8410	101	3	0	1	7221	86	3	0	1
	]		5X5	9094	109	4	0	1	9003	108	4	0	1	7730	93	3	0	1
			T5R	12567	113	4	0	4	12441	112	4	0	4	10682	96	3	0	3
48		110 W	T5W	12175	110	4	0	2	12053	109	4	0	2	10402	94	4	0	2
			T5QN	12022	108	3	0	0	11902	107	3	0	0	10219	92	3	0	(
			T5QM	12342	111	3	0	2	12219	111	3	0	2	10491	95	3	0	2
			T5QW	11055	100	4	0	3	10944	99	4	0	3	9396	85	4	0	3
• •			2X2	13147	118	5	0	1	12685	114	5	0	1	11175	101	5	0	1
			4X4	12969	117	5	0	1	12840	115	5	0	1	11024	99	4	0	-
			5X3	11326	102	4	0	2	11213	101	4	0	2	9627	87	4	0	1
			5X5	12126	109	4	0	1	12004	108	4	0	1	10307	93	4	0	1

<sup>&</sup>lt;sup>1</sup>Lumen values are from photometric tests performed in accordance with IESNA LM-79-08. Data is considered to be representative of the configurations shown. Actual performance may differ as a result of end-user environment and application.

# **ELECTRICAL DATA**

# OF LEDS	NUMBER OF Drivers	DRIVE CURRENT (mA)	INPUT VOLTAGE (V)	SYSTEM POWER (w)	CURRENT (Amps)
27	1	350	120	27.0	0.23
			277		0.10
24	2		120	55.0	0.46
			277		0.20
36	1	700	120	82.0	0.68
30	'	700	277	02.0	0.30
40	-1		120	1100	0.92
48	I		277	110.0	0.40

AMBIENT TEMP	ERATURE	LUMEN MULTIPLIER				
0°C	32°F	1.02				
10°C	50°F	1.01				
20°C	68°F	1.00				
25°C	77°F	1.00				
30°C	86°F	1.00				
40°C	104°F	0.99				
50°C	122°F	0.98				

Use these factors to determine relative lumen output for average ambient temperatures from 0-50°C (32-122°F).

# PROJECTED LUMEN MAINTENANCE

				-			
	AMBIENT				¹TM-21-11		Calculated L70
	TEMP.	0	25,000	50,000	60,000	100,000	(HOURS)
I	25°C / 77°F	1.00	0.97	0.96	0.95	0.93	>587.000

<sup>&</sup>lt;sup>1</sup> Projected per IESNA TM-21-11





Data references the extrapolated performance projections for the base model in a 40°C ambient, based on 10,000 hours of LED testing per IESNA LM-80-08.