

LED Luminaire Lighting

Superior efficiency with maximum durability

GEA Farm Equipment | Norbco

engineering for a better world

GEA Farm Technologies

Altus LED Luminaire

Designed for all of your dairy's needs

The optimized design of the Altus LED Luminaire produces amazingly brilliant cool, white light while delivering superior efficiency. It is designed for the harshest conditions, and ideal for high bay and low bay applications. Design services are available to meet specific customer needs.

Resilient — state-of-the-art hollow extruded aluminum body housing provides up to 40% more heat conduction than competitive die cast heat sinks. There is a high-impact-resistant poly carbonate lens, and the fixture has superior vertical heat sink for heat reduction.

Efficient — provides up to 100 lumens/watt. Optics are engineered for precise light control; no light pollution.

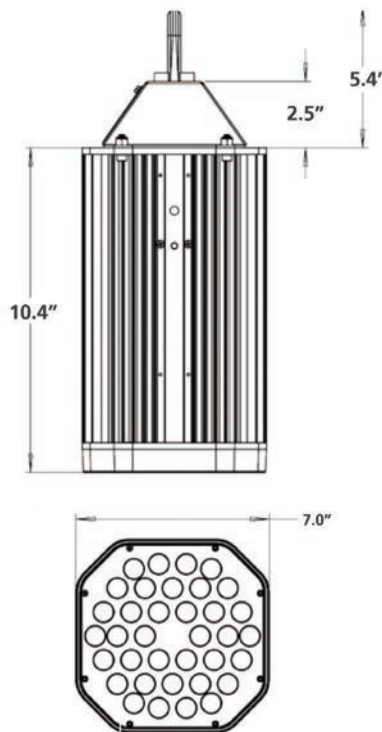
Dependable — optional automated control can provide scheduled on/off and daylight harvesting. Eliminates human error and provides energy savings.



- IP69K rated; high pressure washdown.
- Temperature ratings from -40°F to +113°F (-40°C to +45°C).
- L70 rated for >100,000 hours.
- Ten-year warranty.

Altus Luminaire pendant mount and dimensions

- 7" diameter (anti-bird roost).
- Modular hook cord design.
- Voltage-sensing driver
120-277 — DLC certified.
- Approximate weight: 19 lbs.



Photometry

- Type V wide (5W).
- Uniform light distribution.
- Reduces shadowing or spot-effect seen with typical light fixtures.

Altus LED Luminaire installations

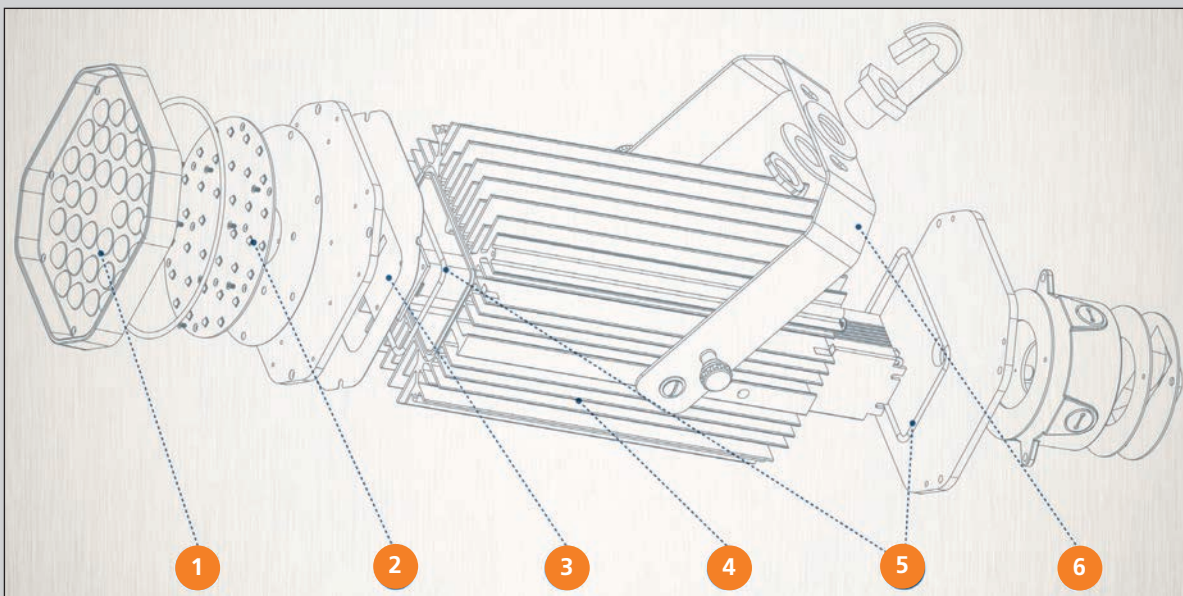


Interior barn illumination.



Exterior barn illumination.

Altus LED Luminaire



1 Optics — gain maximum lighting uniformity and minimize the number of necessary fixtures with this custom-engineered, high-impact-resistant optic design. Delivers an extremely uniform 140° beam angle to create optimal lighting for any environment.

2 LED — high-power-density custom LED array utilizes the highest-quality LEDs available on the market for long life, energy efficiency and brilliant light.

3 Circuit control card — custom designed circuit control card provides highly efficient and constant-balancing power to each of the LED strings. Protects and provides longevity for your LED investment.

4 Heat sink — hollow-body of heat sink is constructed with heavy-duty 6063 extruded aluminum, which is up to 40% more thermally conductive than competitive die-cast aluminum heat sinks. This increase in thermal conductivity provides maximum heat management, resulting in longer LED life.

5 VITON o-rings — protect your investment in even the most extreme conditions. High-performance VITON o-rings are used for reliable sealing at extreme temperatures and in continuous water submersion.

6 Mounting yoke (optional) — custom-engineered, providing variable mounting options, allowing for precise light positioning to pivot and direct light where you need it most.

Altus LED Luminaire illumination tables

Altus 80

Height (Feet)	Average Illumination (FC)				
	Spacing (ft.)				
	15 ft.	20 ft.	25 ft.	30 ft.	35 ft.
10 ft.	34	19	12	9	7
15 ft.	33	18	12	8	7
20 ft.	32	18	11	8	6
25 ft.	31	17	11	8	6

Altus 120

Height (Feet)	Average Illumination (FC)				
	Spacing (ft.)				
	15 ft.	20 ft.	25 ft.	30 ft.	35 ft.
10 ft.	51	28	18	13	10
15 ft.	49	28	18	12	10
20 ft.	48	27	17	12	10
25 ft.	46	26	17	12	9

Altus 140

Height (Feet)	Average Illumination (FC)				
	Spacing (ft.)				
	15 ft.	20 ft.	25 ft.	30 ft.	35 ft.
10 ft.	68	38	25	17	14
15 ft.	66	37	24	17	13
20 ft.	64	36	23	16	13
25 ft.	62	35	22	16	13

Data based on a 300 ft. x 300 ft. room, 80/50/20 reflectance.

Altus LED Luminaire Specifications

Model	LEDs	Lumen Output	System Watts	Efficacy	Input Voltage	Power Factor	CRI	CCT	Operating Temp. °F (°C)	L70 Hours	Cabling*
Altus 80	36	7,517	80	94	VL:90-277VAC	>0.92	>75	5,000K	-40°F to 131°F (-40°C to 55°C)	225,000	N06
Altus 120	36	10,850	120	90	VL:90-277VAC	>0.95	>80	5,000K	-40°F to 122°F (-40°C to 50°C)	225,000	N06
Altus 140	36	13,768	120	114	VL:90-277VAC	>0.95	>80	5,700K	-40°F to 122°F (-40°C to 50°C)	225,000	N06

* N = no plug; number = length (feet)

The specifications listed were obtained under optimal testing conditions. Please note that changes in options, features and conditions may result in slightly different performance specifications among fixtures.

Visium™ LED Luminaire Series

Designed to go where no light has gone before

Engineered for exceptional versatility, the Visium Series LED Luminaire was developed for extreme and demanding environmental conditions. Visium is ideal for hard to reach areas – high ceilings, holding or parlor areas – are all in a day's work for this light. Visium provides the smartest and most efficient way to light your challenging areas. Design services are available to meet specific customer needs.

Resilient — state-of-the-art extruded aluminum housing provides up to 40% more heat conduction than competitive die cast heat sinks. The Visium light is water resistant and maintenance free, and has a high-impact-resistant tempered glass lens. The isolated power supply provides superior LED thermal management.

Efficient — provides up to 98 lumens/watt, with more light produced at 75% power. Optics are engineered for precise light control; special optics available for custom light control.

Dependable — optional automated control can provide scheduled on/off and daylight harvesting. Eliminates human error and provides energy savings.



- IP66 rated; dust and water tight.
- Temperature ratings from -40°F to +149°F (-40°C to +65°C).
- 95% light output for >10 years.
- L70 rated for >135,000 hours.
- Ten-year warranty.



Additional product information

Input power — 120-277V, 277-360V (DLC certified), 360-480V (non-DLC certified).

Optics — Type V Narrow (19°), Type V Wide (27°), Type V Extra-wide (55°), Type V (115°), Elliptical 19° x 55°, Elliptical 24° x 90°.

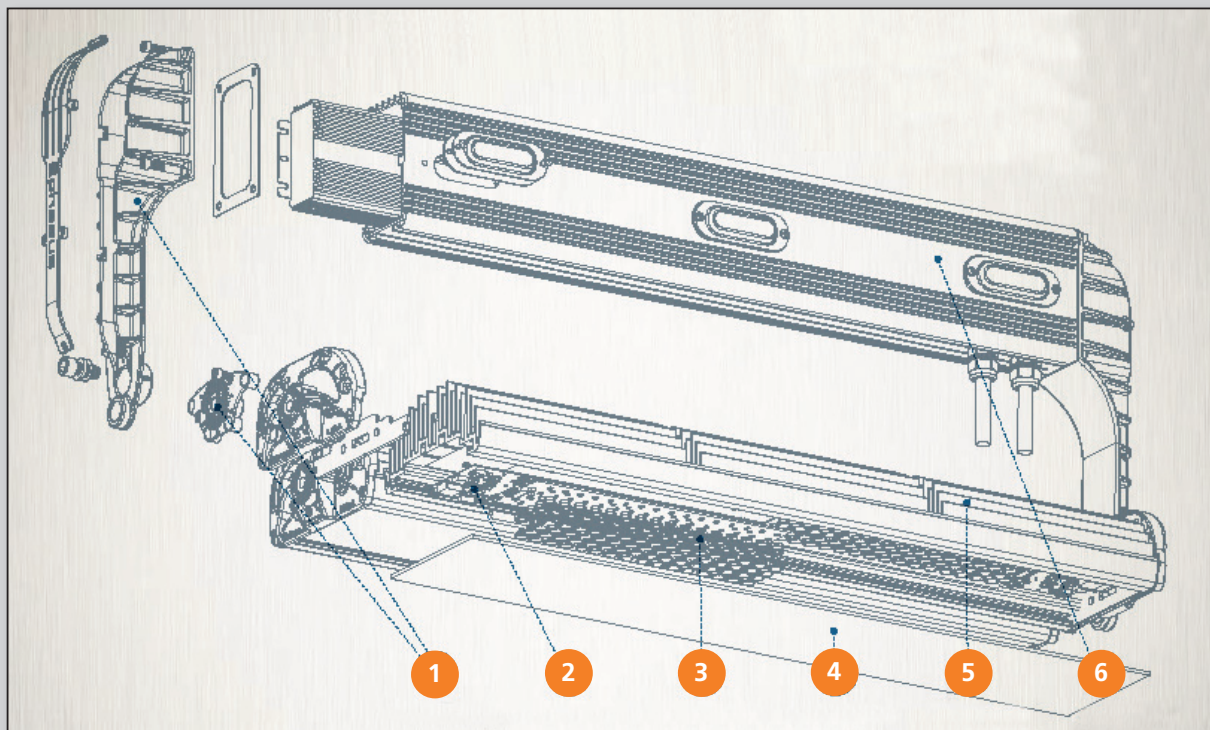
Mounting options — center stud and multi-mount.

0-10V dimming capabilities — featured on all units.



Exterior barn illumination.

Visium LED Luminaire



1 Brackets — die-cast joiner brackets with locking teeth and mounting brackets allow for modular assembly and precision, aiming to pivot and direct light where you need it most.

2 Smart electronics — custom designed controller card with pulse-width dimming for constant color temperature vs. light output. LED temperature is continuously measured and the LEDs dim as required, to ensure luminaire reliability in environments up to 149°F (65°C).

3 Optics & LED array — gain maximum lighting uniformity and minimize the number of fixtures with this custom-engineered optic design. Customized optics are available for maximum efficiency. The high-power density metal core LED array is capable of delivering up to 500 Lm/in².

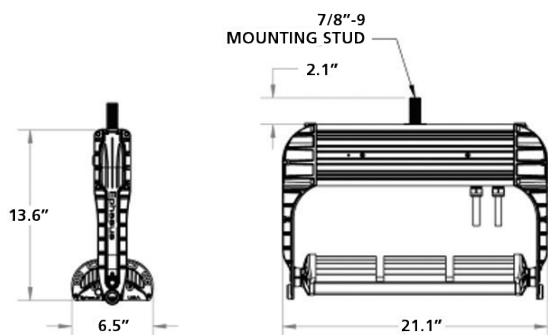
4 Sealing lens — tempered diffused glass treated with anti-reflective coating for maximum light transmission, glare control and high-impact resistance.

5 Heatsink — ultra corrosion resistant, heavy-duty 6063 extruded aluminum, heatsink construction for maximum thermal management and workhorse performance.

6 Power supply — isolated power supply ensures lower temperature operation of the power supply and LEDs, providing greater than 120,000 hours of operating life.

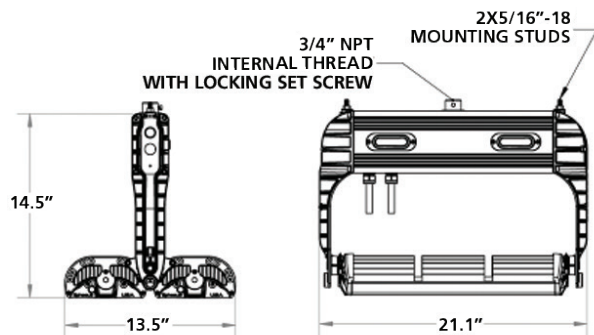
Visium LED Luminaire mounting options and dimensions

(Weight may vary with mounting options.)



Visium 190

- Center stud
- Approximate weight: 18 lbs.



Visium 300

- Multi-mount
- Approximate weight: 31 lbs.

Visium Luminaire illumination tables

Visium 190

Illumination at a Distance (FC)					
Height (ft.)	-5	-5N	-5W	-5EL	-5EW
20 ft.	14	138	84	79	50
30 ft.	6	70	41	37	23
40 ft.	4	41	23	21	13
50 ft.	2	27	15	14	8
60 ft.	2	19	11	10	6
70 ft.	1	14	8	7	4

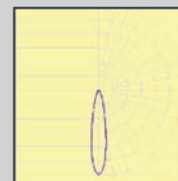
Visium 300

Illumination at a Distance (FC)					
Height (ft.)	-5	-5N	-5W	-5EL	-5EW
30 ft.	23	226	138	139	82
40 ft.	10	115	66	61	38
50 ft.	6	68	38	35	21
60 ft.	4	44	25	23	14
70 ft.	3	31	17	16	10

Photometry



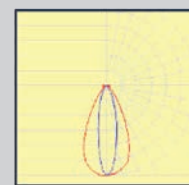
Type 5



Type 5N



Type 5W



Type 5EL



Type 5EW

Visium LED Luminaire specifications

Model	LEDs	Lumen Output	System Watts	Efficacy	Input Voltage	Power Factor	CRI	CCT	Operating Temp. °F (°C)	L70 Hours	Cabling*
Visium 190	64	18,180	183	99	VL:120-277VAC	>0.94	>70	5,600K	-40°F to 149°F (-40°C to 65°C)	225,000	N06
Visium 300	128	32,674	297	110	VL:120-277VAC	>0.94	>70	5,600K	-40°F to 149°F (-40°C to 65°C)	225,000	N06

* N = no plug; number = length (feet)

The specifications listed were obtained under optimal testing conditions. Please note that changes in options, features and conditions may result in slightly different performance specifications among fixtures.



We live our values.

Excellence • Passion • Integrity • Responsibility • GEA-versity

GEA Group is a global engineering company with multi-billion euro sales and operations in more than 50 countries. Founded in 1881, the company is one of the largest providers of innovative equipment and process technology. GEA Group is listed in the STOXX® Europe 600 index.

GEA Farm Technologies

GEA Farm Technologies, Inc.

4754 State Route 233, Westmoreland, NY 13490
Tel: 315.853.3936

www.gea.com | www.gea-farmtechnologies.com/norbco/en

20903 W. Gale Avenue, Galesville, WI 54630

Tel: 608.582.3081

www.gea.com | www.gea-farmtechnologies.com/norbco/en

2500 E Tulare Avenue, Tulare, CA 93274

Tel: 559.686.7835

www.gea.com | www.gea-farmtechnologies.com/norbco/en