

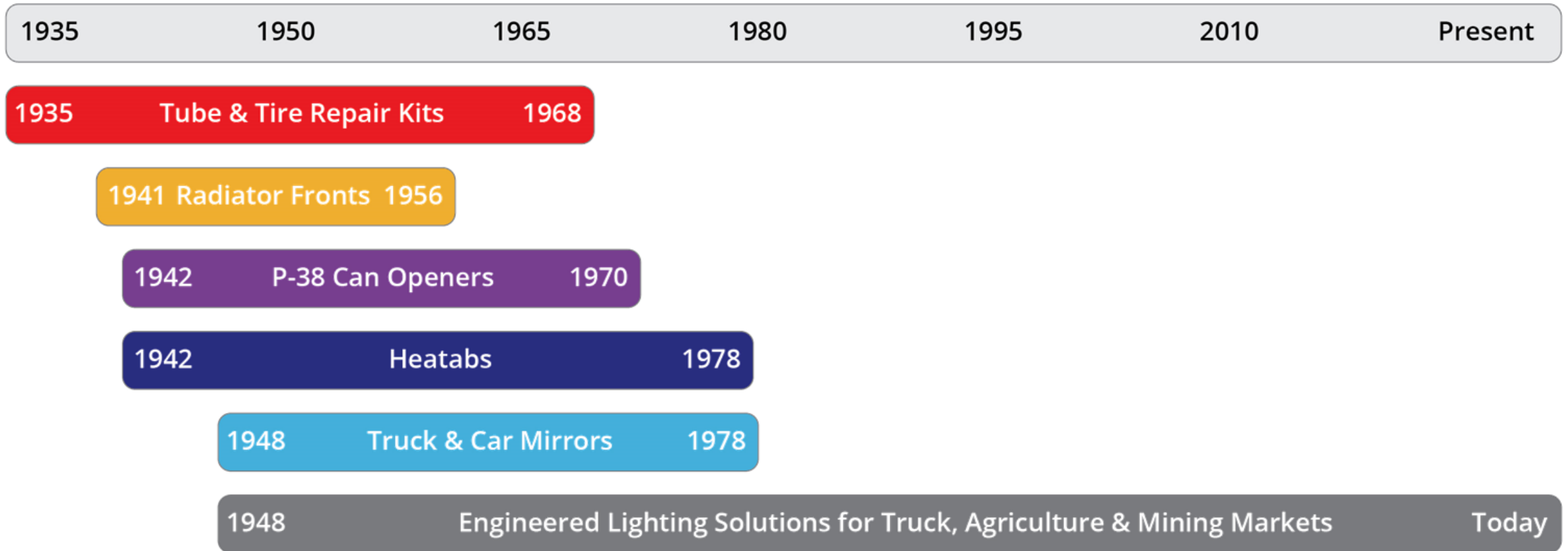


The Intersection of Science + Design

Our History

- Today, J.W. Speaker Corporation is still family owned and ran business
- Lead by Tim and Jamie Speaker with their management team
- Development of world leading LED forward lighting for key OEM worldwide
- Growing into the aftermarket with the latest LED performance technology
- Expanding into different markets around the global as a key brand
- Work closely with our OEM and aftermarket distributor to develop the world first LED headlamps, work lamps and safety products
- To meet all our customers need and wants with latest technology in LED lighting

Our History





Design Manufacturing Innovative Products for Over 80 years



Safety Through Innovative Lighting Product

By J.W. Speaker

CAT 7495 Electric Rope Shovel LED Scene Illumination

CAT 7495



7495 with HydraCrowd Electric Rope Shovel

Lights

- HPS lights on boom feet, top of A-frame, machinery house, lube room, control room, and utility room.
- Incandescent lights for ground lights and on walkways.

Front End

Boom

Boom	welded, impact-resistant steel
Boom point sheaves	twin-grooved, flame-hardened
Boom point sheave diameters	243.84 cm 96 in
Handle diameter	86.36 cm 34 in
Wall thickness (nominal)	7.62 cm 3 in

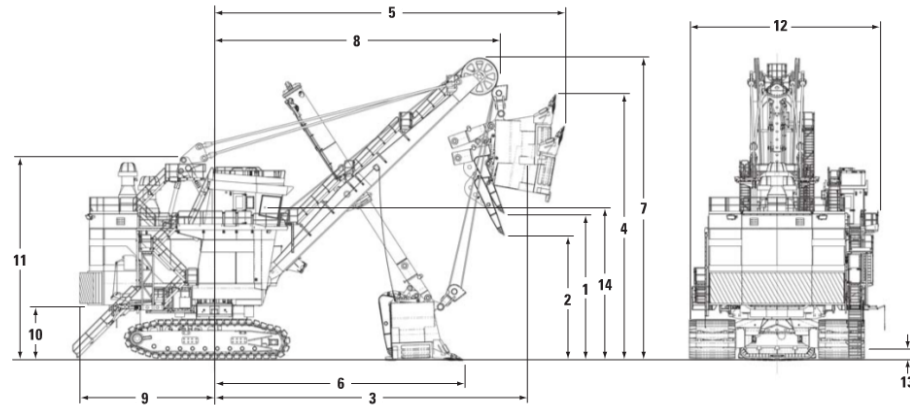
Front End (cont'd)

Rope Data

	No.	Diameter	Type	Construction
Hoist	2	69.8 mm (2.75 in)	twin dual	8 × 37
Boom susp.	4	82.6 mm (3.25 in)	equalized	struct. strand
Dipper trip	1	19.1 mm (0.75 in)	single	7 × 25

Crowd

- HydraCrowd™, hydraulic power skid, located at the front center of the revolving frame deck, powers a large hydraulic cylinder to move the dipper handle fore and aft.
- Hydraulic cylinder bore diameter (nominal) 35.6 cm 14 in
- Hydraulic cylinder rod diameter (nominal) 25.4 cm 10 in
- (Optional) Rope Crowd, the crowd machinery is located at the front center of the revolving frame, consisting of motor, brake, drum and gearing. Plastic-coated crowd and retract ropes are used to move the dipper handle fore and aft.

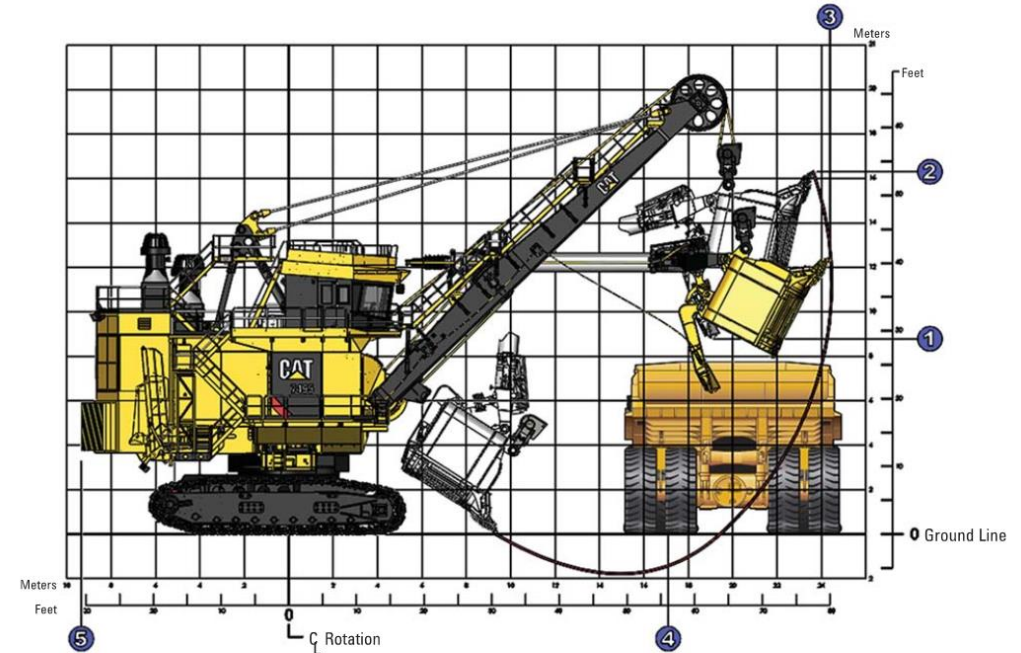


Optimal Working Ranges

1 Dumping height	10.06 m	33 ft 0 in	8 Clearance radius (boom point sheaves)	19.65 m	64 ft 5 in
2 Dumping height at maximum electric crowd limit	8.61 m	28 ft 3 in	9 Clearance radius (revolving frame) (max.)	9.34 m	30 ft 8 in
3 Dumping radius (maximum)	21.64 m	71 ft 0 in	10 Clearance under frame (to ground)	3.76 m	12 ft 4 in
4 Cutting height (maximum)	17.8 m	58 ft 5 in	11 Height of A-frame	14 m	46 ft 0 in
5 Cutting radius (maximum)	25.2 m	82 ft 8 in	12 Overall width	13.11 m	43 ft 0 in
6 Radius of level floor	17.47 m	57 ft 4 in	13 Clearance under lowest point in truck frame/propel gearcase	0.90 m	2 ft 11.5 in
7 Clearance height (boom point sheaves)	20.87 m	68 ft 6 in	14 Operator's eye level	10.61 m	34 ft 10 in

Dimensions – with Rope Crowd

All dimensions are approximate.



Optimal Working Ranges*

1 Dumping height – with clearance to open dipper door	8.8 m	28 ft 11 in
2 Cutting height (maximum)	16.3 m	53 ft 6 in
3 Cutting radius (maximum)	24.4 m	80 ft 0 in
4 Radius of level floor	17.1 m	56 ft 1 in
5 Revolving frame tail swing radius	9.3 m	30 ft 8 in

Optimal working ranges based on loading a Cat 797F truck.

*All specifications are based on a 56 m³ (73 yd³) dipper and standard 200.7 cm (79 in) treads.

Front View:

① Model 623 Wide Flood

② Model 623 Medium Flood

This combination will give full illumination for front at the face





Front Top Of Cab:

① Model 623 Wide Flood

This combination if require
illumination of boom when require

Left Side View:

① Model 623 Wide Flood

For illumination on Non Driver
Cab Side





Right Side View:

① Model 623 Wide Flood

For illumination on Driver Cab Side

Having 2 on drive side will add safety and easy viewing for the operator.

If deciding on 2 Model 623 move one to top of cab and other move further back.

Perfect illumination for Drive Cab side

Rear Side View:

① Model 623 Wide Flood

For illumination on Rear





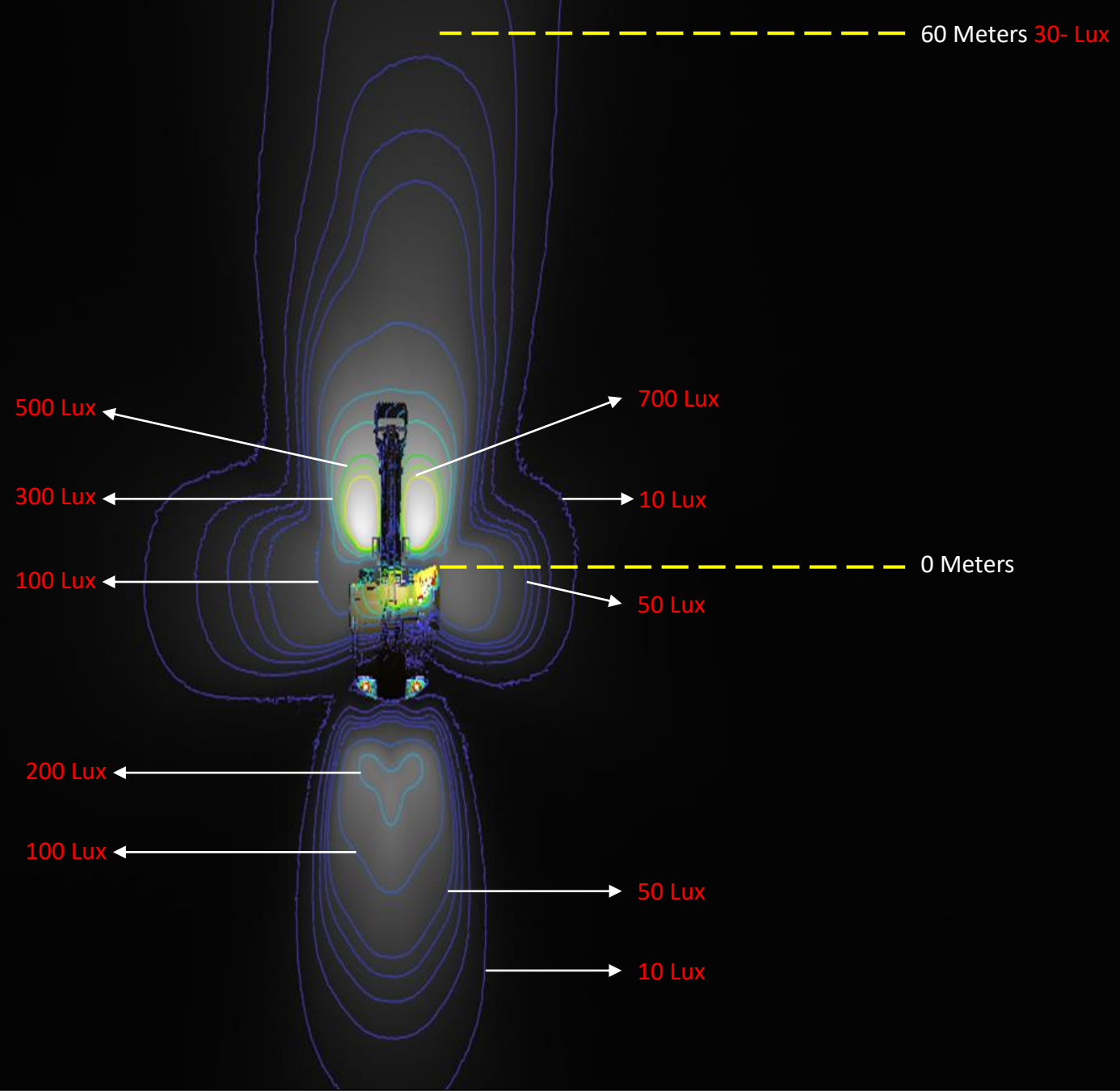
V.R. Mapping For CAT 7495

CAT 7495 VR Mapping

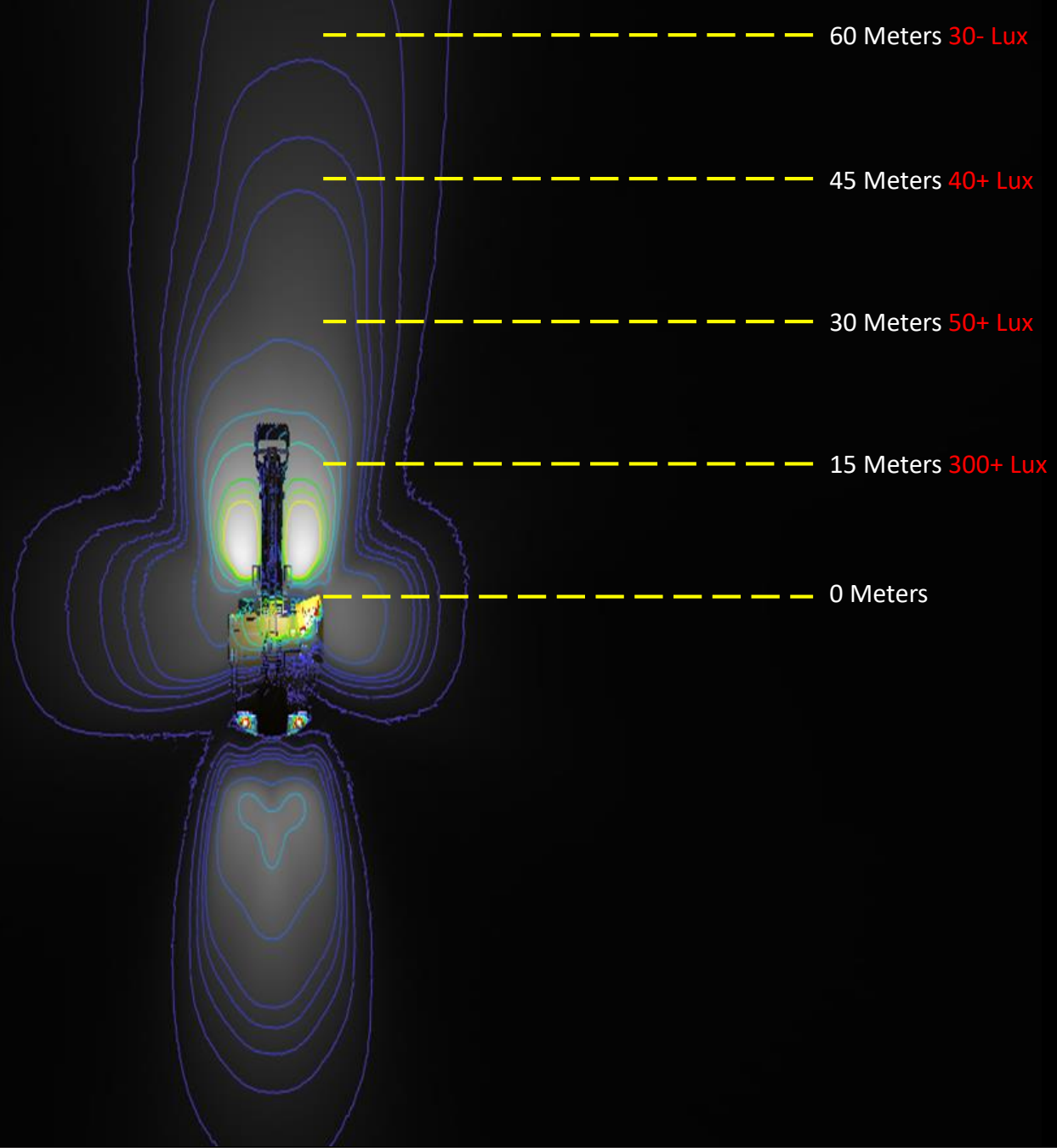
- All OE standard lighting replace with Model 623 in the same position
- Model 623 IP67 and IP69K 16-60VDC, weight 8.16kg
- Raw Lumen 40,000 and Effective 20,000 Lumen
- Colour Temperature 5700K (Kelvin), Daylight at High Noon 5500k
- AC/DC Converter Box 24V 240W 110-277V AC IP69K with plug and play cable



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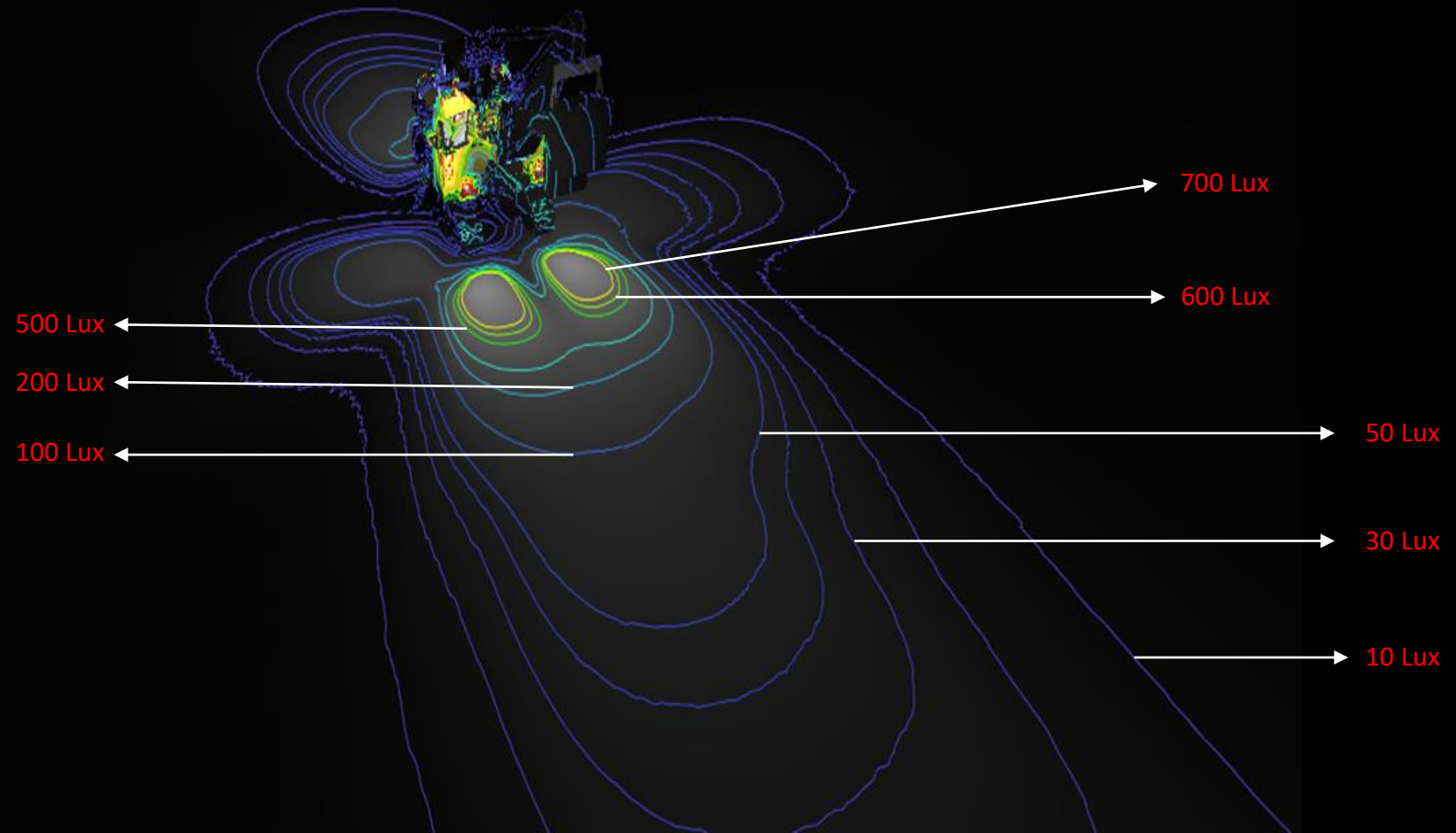
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CAT 7495 Product Use



PRODUCT INFORMATION

Description	16-60V LED Work
Height	216.41 mm / 8.52 in
Width	498.60 mm / 19.63 in
Depth	88.90 mm / 3.5 in
Shape	Rectangular
Outer Lens Material	Glass
Outer Lens Color	Clear
Housing Material	Die-Cast Aluminum
Housing Color	Black
Mounting Type	Universal Pedestal Mount
Minimum Operating Temperature	-40 °C / -40 °F
Maximum Operating Temperature	65 °C / 149 °F
Product Weight	18.00 lbs / 8.16 kgs
Shipping Weight	19.63 lbs / 8.9 kgs
Additional Information	Wire Harness: SJ000W 6m Harness

ELECTRICAL SPECIFICATIONS

Input Voltage	24-48V DC
Operating Voltage	16-60V DC
Transient Spike Protection	150V peak @ 1 HZ-100 Pulses
Current Draw	10A @ 24V DC 5A @ 48V DC

REGULATORY STANDARDS COMPLIANCE



Buy America Standards
IEC IP67
UL Recognized

Eco Friendly
IEC IP69K

PHOTOMETRIC SPECIFICATIONS

Raw Lumen Output	40,000
Effective Lumen Output	20,000
Nominal LED Color Temperature	5700 K



Model 623

10 Wide Flood 2 Medium Flood

CAT 7495 Product Use



PRODUCT INFORMATION

Description	24V 240W AC/DC Converter Box
Height	106.00 mm / 4.17 in
Width	281.00 mm / 11.06 in
Depth	318.72 mm / 12.55 in
Shape	Rectangular
Housing Material	Xenoy
Housing Color	Black
Connector or Wiring	Input & Output Wire Harness Ordered Separately
Product Weight	3.37 lbs / 1.53 kgs
Shipping Weight	3.87 lbs / 1.76 kgs
Additional Information	Input: 100-277 V AC 50/60Hz input Output: 24 V DC Output Current Max: 10 Amp UL recognized, Class 2 power supplies

ELECTRICAL SPECIFICATIONS

Input Voltage 100-277V AC

REGULATORY STANDARDS COMPLIANCE



Eco Friendly
UL Recognized



IEC IP69K



AC Cable



Model 6406



DC Cable

12 AC Cable, 12 DC Cable, 12 AC/DC Converter

Summary

- Illumination colour temperature of 5700K, Daylight at High Noon is 5500k
- CRI of 90+ reproduce the colours of various objects as "realistically" or "naturally"
- Design for industrial application
- Model 623 LED Scene Lamp 5 year warranty
- Model 6406 Converter 1 year warranty
- Design and manufacture in USA



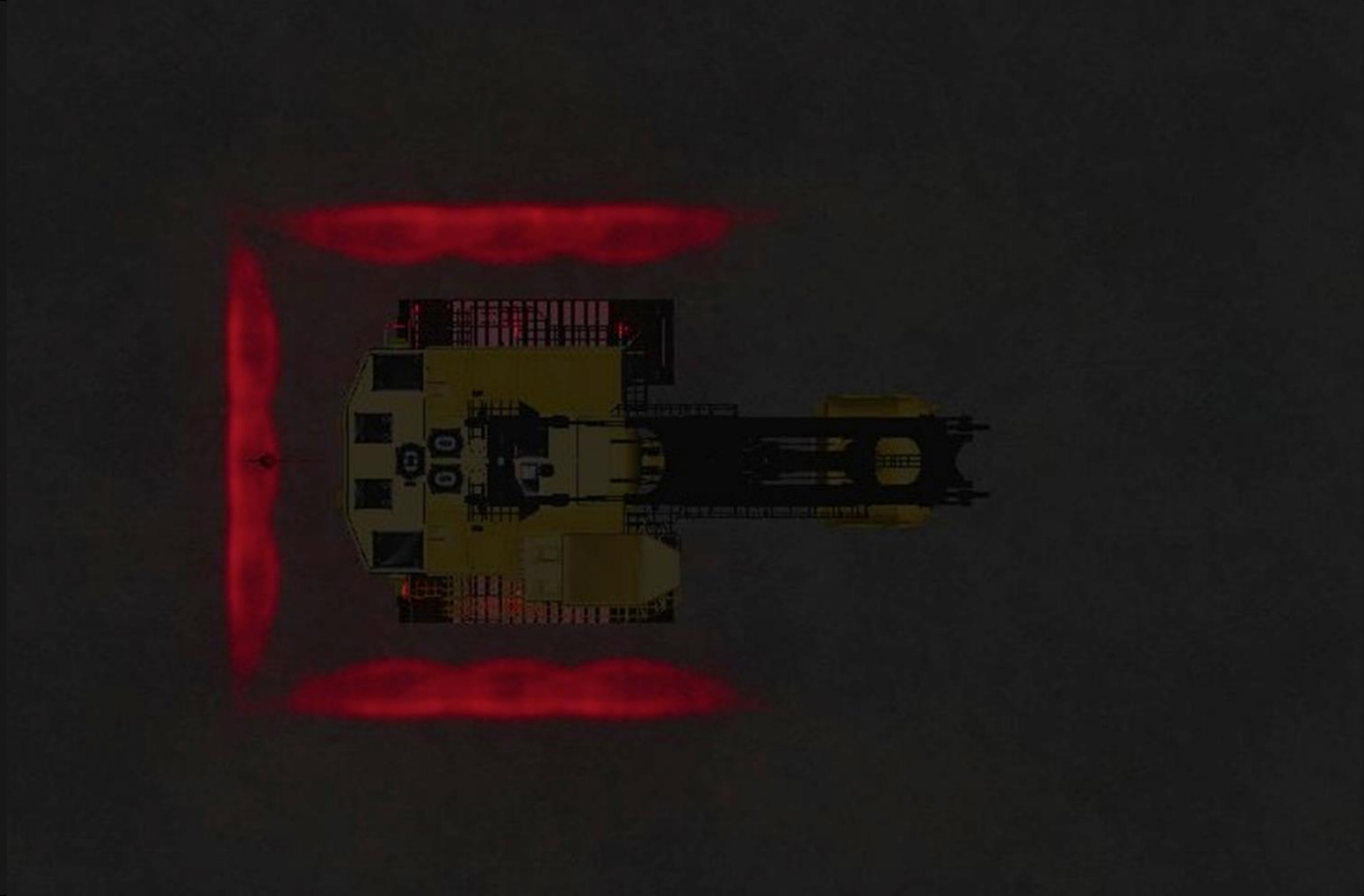
Safety Through Innovative Lighting Product

By J.W. Speaker

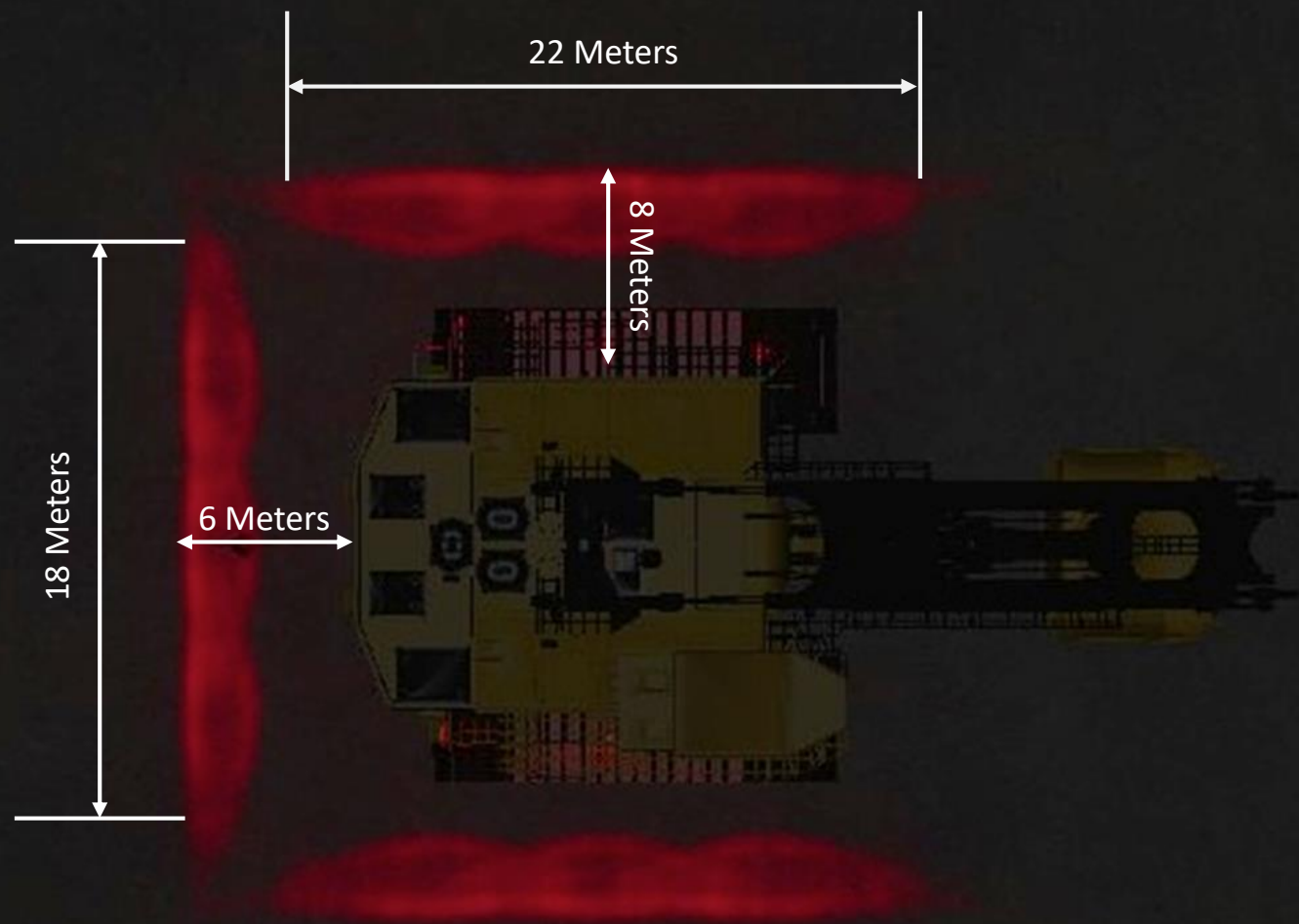
CAT 7495 Electric Rope Shovel Red Zone

CAT 7495 Red Zone

- 9 Model 527 LED Red No Go Zone Lamps
- Mounted at 8m to 8.5m high
- 3 Left and Right hand side fitted around upper deck under the hand rails.
- Set at 4m apart, aimed 50° down
- 3 at rear fitted at the top spaced
- Set at 4m apart, aimed 55° down



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VR Large Shovel with Model 623 LED Scene Lighting and Model 527 Red Zone



The Intersection of Science + Design

CAT 7495 Product Use

PRODUCT INFORMATION

Description	12-24V LED Red Zone Light
Height	123.70 mm / 4.87 in
Width	258.57 mm / 10.18 in
Depth	102.11 mm / 4.02 in
Shape	Rectangle
Outer Lens Material	Glass
Outer Lens Color	Clear
Housing Material	Xenoy
Housing Color	Black
Mounting Hardware Description	(x2) M8-1.25 Mounting Bolt
Mounting Type	Universal Pedestal Mount
Minimum Operating Temperature	-40 °C / -40 °F
Maximum Operating Temperature	65 °C / 149 °F
Connector or Wiring	Integrated 2-Pin Deutsch Weatherproof Socket (DT04-2P)
Mating Connector	Integrated 2-Pin Deutsch Weatherproof Plug (DT06-2S)
Product Weight	2.60 lbs / 1.18 kgs
Shipping Weight	5.70 lbs / 2.59 kgs
Additional Information	The dominant wavelength is about 615nm.

ELECTRICAL SPECIFICATIONS

Input Voltage	12-24V DC
Operating Voltage	10-32V DC
Transient Spike Protection	150V peak @ 1 HZ-100 Pulses
Red Wire	Positive
Black Wire	Negative
Current Draw	1.6A @ 12V DC 0.85A @ 24V DC



Model 527
9 Red Zone

REGULATORY STANDARDS COMPLIANCE



Buy America Standards
IEC IP69K

Eco Friendly

CAT 7495 Product Use



PRODUCT INFORMATION

Description	24V 35W AC/DC Converter Box
Height	78.00 mm / 3.07 in
Width	200.00 mm / 7.87 in
Depth	236.00 mm / 9.29 in
Shape	Rectangular
Housing Material	Xenoy
Housing Color	Black
Maximum Operating Temperature	50 °C / 122 °F
Connector or Wiring	Input & Output Wire Harness Ordered Separately
Product Weight	1.12 lbs / 0.51 kgs
Shipping Weight	1.62 lbs / 0.73 kgs
Additional Information	Input: 100-240 V AC 50/60Hz Input Output: 24 V DC Output Current Max: 1.5 Amp UL recognized, Class 2 power supplies

ELECTRICAL SPECIFICATIONS

Input Voltage 100-240V AC

REGULATORY STANDARDS COMPLIANCE



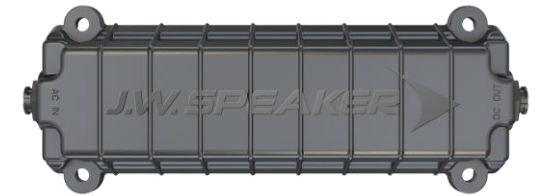
Eco Friendly
UL Recognized



IEC IP69K



AC Cable



Model 6404



AC Cable

9 AC Cable, 9 DC Cable, 9 AC/DC Converter

Large Shovel with LED Scene Lighting and Red Zone in Action



The Intersection of Science + Design

Summary

- Identify danger area around shovel with Red Warning Zone at night
- Increase night time production with easy identify where to load
- Easy fitment around walkway or other trouble-free location
- Only require 9 Lamps
- Design for industrial application
- Model 527 LED Red Zone 5 year warranty
- Model 6404 Converter 1 year warranty
- Design and manufacture in USA

Commitment

- J.W. Speaker are fully commit to the Safety in all mining equipment from the correct illumination and Red Zone area
- To work direct with the OEM and Mine site to design and develop product to suit the industrial market
- All product are available worldwide through key distributions who comprehend the Industrial Market to meet all demand

Thank you

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