

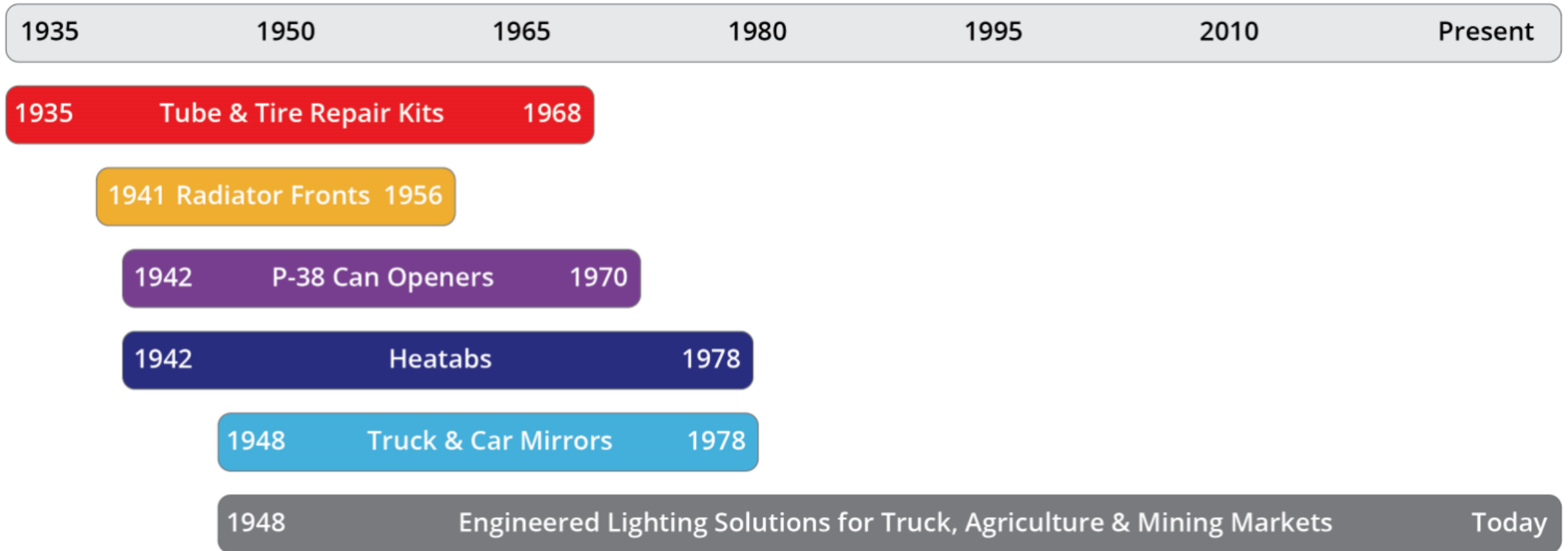


The Intersection of Science + Design

# 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

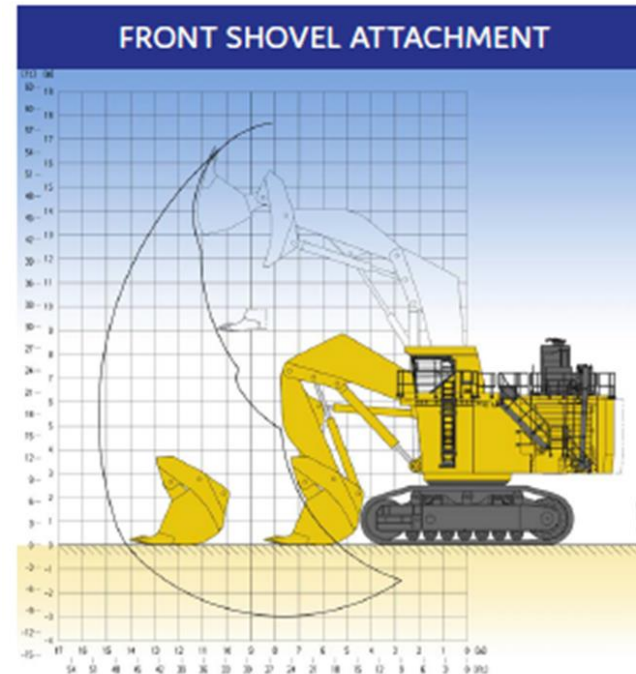
By J.W. Speaker

# Komatsu PC4000 Shovel LED Scene Illumination

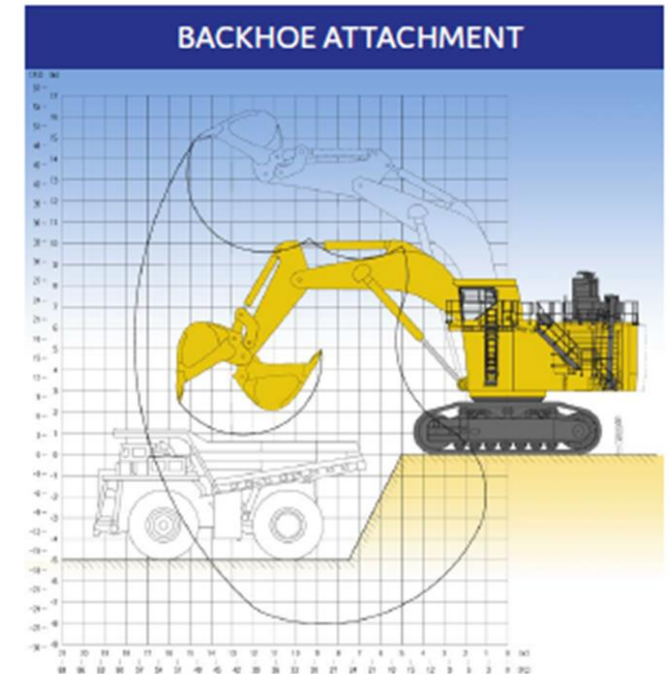
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# Komatsu PC 4000



<b>Boom length</b>	<b>Stick length</b>
7,150 mm (23'6")	4,900 mm (16'1")
<b>Max. cutting height</b>	<b>Max. dumping height</b>
17,690 mm (58'0")	11,710 mm (38'5")
<b>Max. digging depth</b>	<b>Max. digging reach</b>
2,970 mm (9'9")	15,330 mm (50'4")
<b>Break-out force (ISO)</b>	<b>Crowd force (ISO)</b>
1,349 kN (303,220 lb)	1,330 kN (298,950 lb)



<b>Boom length</b>	<b>Stick length</b>
9,750 mm (32'0")	4,500 mm (14'9")
<b>Max. digging height</b>	<b>Max. dumping height</b>
14,880 mm (48'10")	9,610 mm (31'6")
<b>Max. digging depth</b>	<b>Max. digging reach</b>
8,000 mm (26'3")	17,610 mm (57'9")
<b>Break-out force (ISO)</b>	<b>Tear-out force (ISO)</b>
1,239 kN (278,490 lb)	1,058 kN (237,810 lb)

Front View:

① Model 623 Wide Flood

① Model 623 Medium Flood

This combination will give full illumination for front at the face for **option 1 and 2**







Left Side View:

**1** Model 623 Wide Flood

For illumination on Cab Side  
**Option 1**





Left Side View:

① Model 623 Wide Flood

For illumination on Cab Side  
**Option 2**

Right Side View:

① Model 623 Wide Flood

For illumination on Non Driver  
Cab Side **Option 1**





Right Side View:

① Model 623 Wide Flood

For illumination on Non Driver  
Cab Side **Option 2**





Rear View:

① Model 623 Wide Flood

For illumination on Rear **Option 1**



Rear View:

① Model 623 Wide Flood

For illumination on Rear **Option 2**





V.R.  
Mapping  
For Komatsu  
PC 4000





# Komatsu PC 4000 VR Mapping

- Use Model 623 making the shovel or Backhoe as main Illumination
- 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
- Diesel System 24V Only require Model 623
- AC/DC Converter Box 24V 240W 110-277V AC IP69K with plug and play cable

# Komatsu PC 4000

Option 1

7 Model 623

360 illumination









# Komatsu PC4000 24V System

## 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	Eco Friendly
IEC IP67	IEC IP69K
UL Recognized	

## PHOTOMETRIC SPECIFICATIONS

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



Model 623

6 Wide Flood 1 Medium Flood for 24V System

# Komatsu PC4000 AC System

PRODUCT INFORMATION

Description	100-277V LED Work Light
Height	216.33 mm / 8.52 in
Width	498.52 mm / 19.63 in
Depth	74.80 mm / 2.94 in
Shape	Rectangular
Outer Lens Material	Glass
Outer Lens Color	Clear
Housing Material	Die-Cast Aluminum
Housing Color	Black
Bezel Color	Black
Mounting Type	Universal Pedestal Mount
Minimum Operating Temperature	-40 °C / -40 °F
Maximum Operating Temperature	90 °C / 194 °F
Product Weight	18.00 lbs / 8.16 kgs
Shipping Weight	19.49 lbs / 8.84 kgs

ELECTRICAL SPECIFICATIONS

Input Voltage	100-277V AC
Operating Voltage	100-277V AC
White Wire	Power
Black Wire	Ground
Current Draw	4A @ 115V AC

REGULATORY STANDARDS COMPLIANCE



Buy America Standards  
IEC IP67

Eco Friendly  
IEC IP69K

PHOTOMETRIC SPECIFICATIONS

Raw Lumen Output	33,600
Effective Lumen Output	20,500
Nominal LED Color Temperature	5000 K



Model 623

6 Wide Flood 1 Medium Flood for 110-277V System

# Komatsu PC 4000

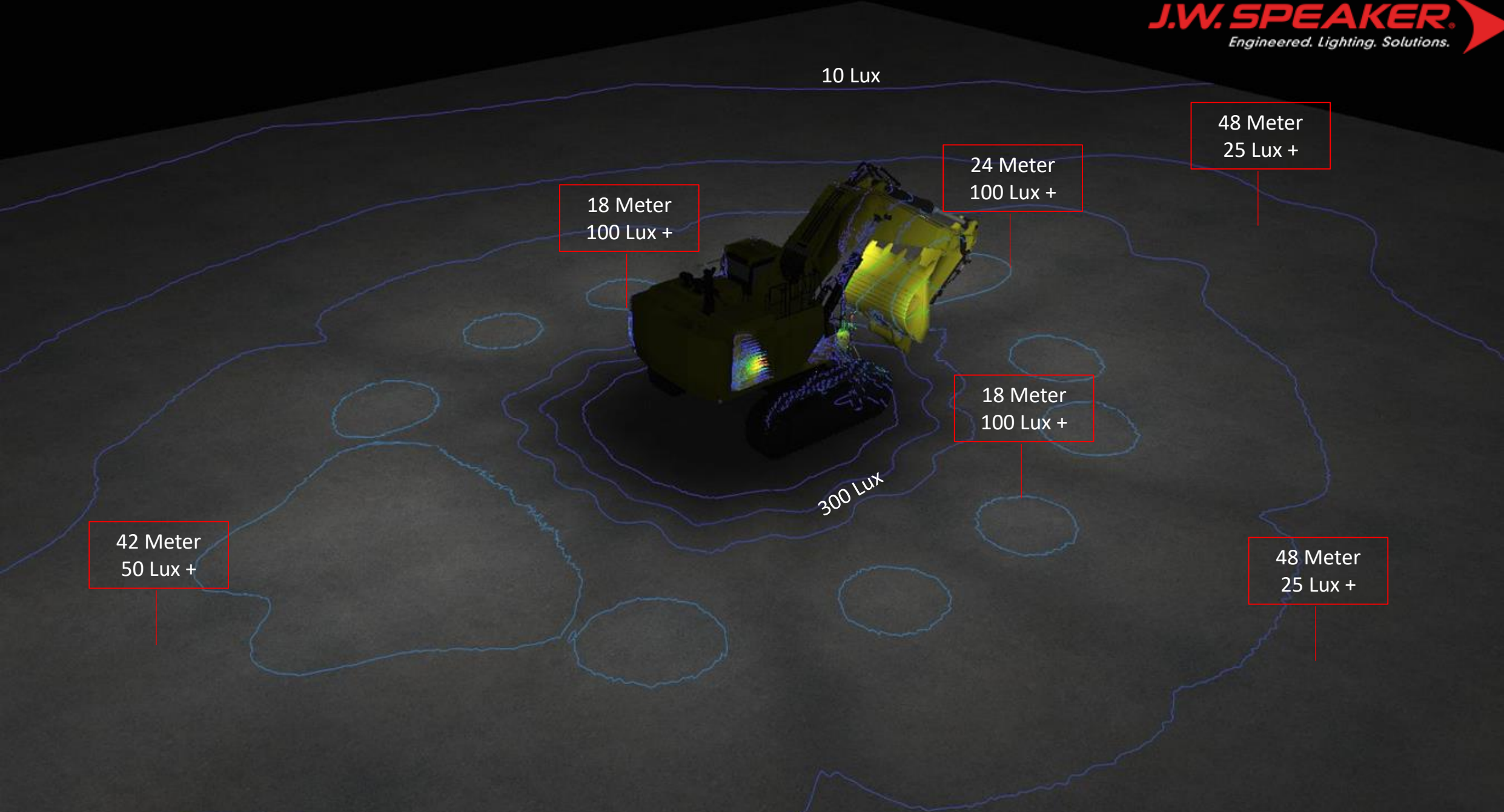
Option 2

13 Model 623

Full clean illumination

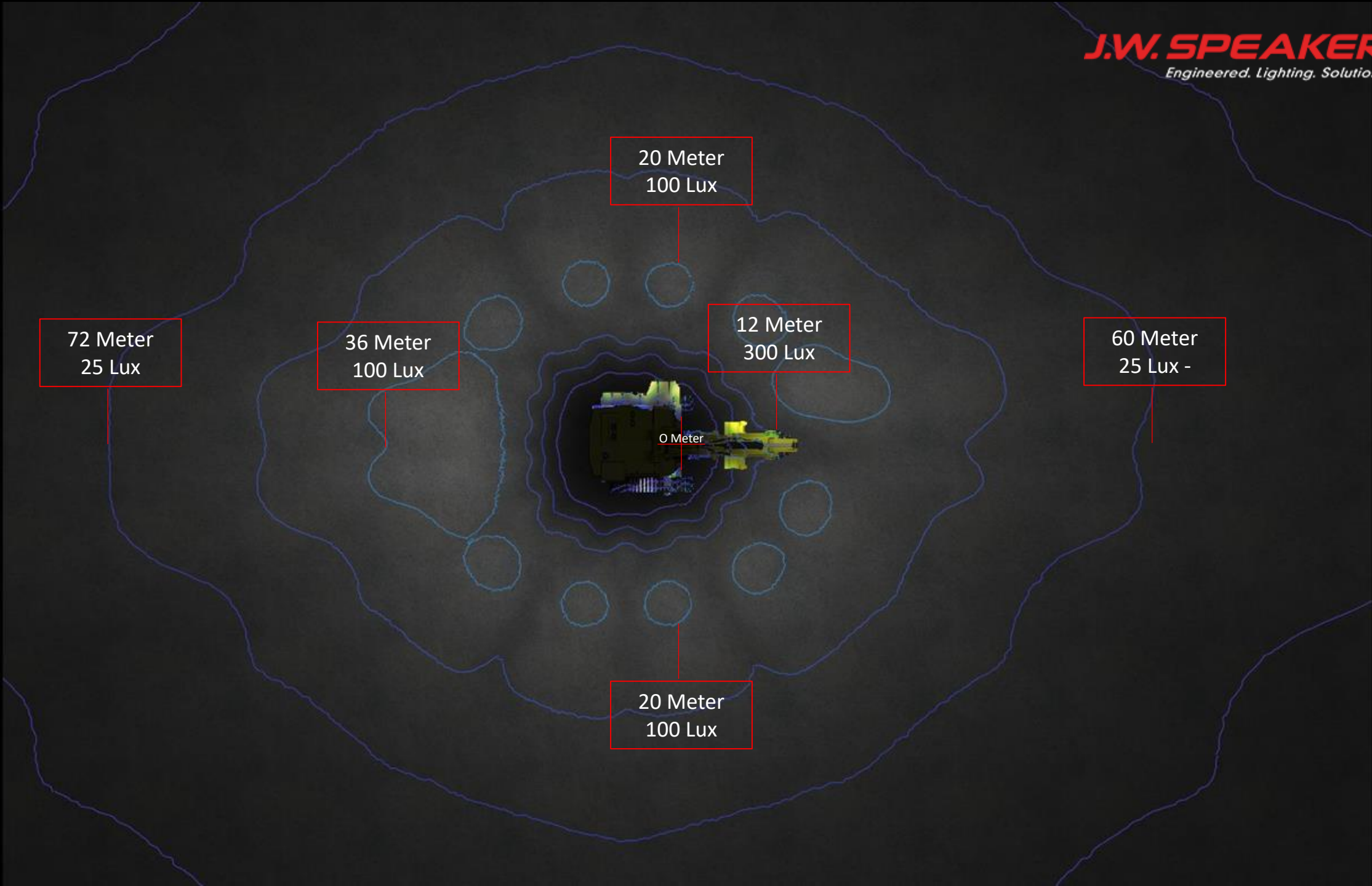














# Komatsu PC4000 24V System

## 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	Eco Friendly
IEC IP67	IEC IP69K
UL Recognized	

## PHOTOMETRIC SPECIFICATIONS

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



Model 623

12 Wide Flood 1 Medium Flood for 24V System

# Komatsu PC4000 AC System

PRODUCT INFORMATION

Description	100-277V LED Work Light
Height	216.33 mm / 8.52 in
Width	498.52 mm / 19.63 in
Depth	74.80 mm / 2.94 in
Shape	Rectangular
Outer Lens Material	Glass
Outer Lens Color	Clear
Housing Material	Die-Cast Aluminum
Housing Color	Black
Bezel Color	Black
Mounting Type	Universal Pedestal Mount
Minimum Operating Temperature	-40 °C / -40 °F
Maximum Operating Temperature	90 °C / 194 °F
Product Weight	18.00 lbs / 8.16 kgs
Shipping Weight	19.49 lbs / 8.84 kgs

ELECTRICAL SPECIFICATIONS

Input Voltage	100-277V AC
Operating Voltage	100-277V AC
White Wire	Power
Black Wire	Ground
Current Draw	4A @ 115V AC

REGULATORY STANDARDS COMPLIANCE



Buy America Standards  
IEC IP67

Eco Friendly  
IEC IP69K

PHOTOMETRIC SPECIFICATIONS

Raw Lumen Output	33,600
Effective Lumen Output	20,500
Nominal LED Color Temperature	5000 K



Model 623

12 Wide Flood 1 Medium Flood for 110-277V System



# 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



# Komatsu PC4000 Shovel Red Zone

Safety Through Innovative Lighting Product

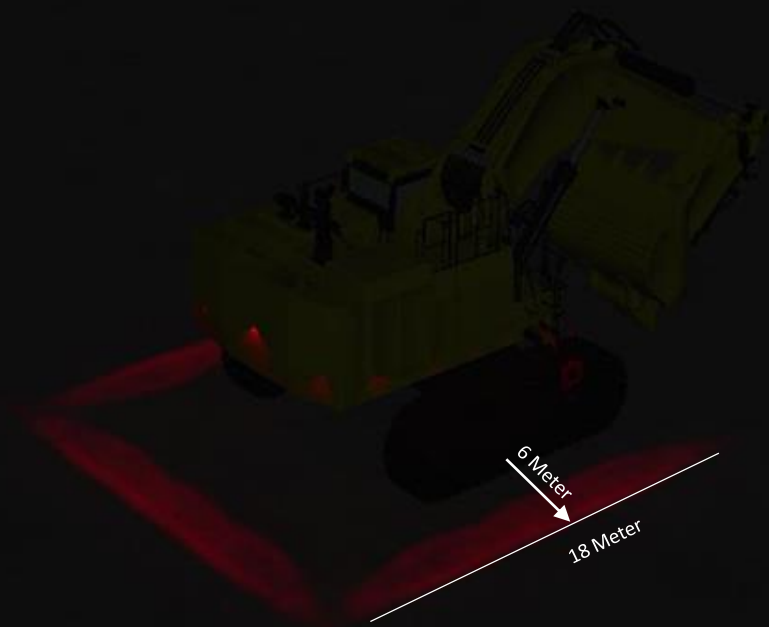
By **J.W. Speaker**

The Intersection of Science + Design



# Komatsu PC4000 Red Zone

- 9 Model 527 LED Red No Go Zone Lamps
- Mounted at 6m high and 50 degrees down
- 3 Left, Right and rear hand side fitted around upper deck under the hand rails.













# Komatsu PC 4000 24V System

## 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

USA

ECO

IP69K

Buy America Standards  
IEC IP69K

Eco Friendly



# Komatsu PC 4000 AC System



## 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



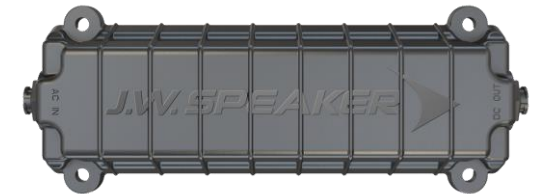
Eco Friendly  
UL Recognized



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



# 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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