



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



1935 Tube & Tire Repair Kits 1968

1941 Radiator Fronts 1956

1942 P-38 Can Openers 1970

1942 Heatabs 1978

1948 Truck & Car Mirrors 1978

1948 Engineered Lighting Solutions for Truck, Agriculture & Mining Markets Today



Design Manufacturing Innovative Products for Over 80 years



J.W. SPEAKER 

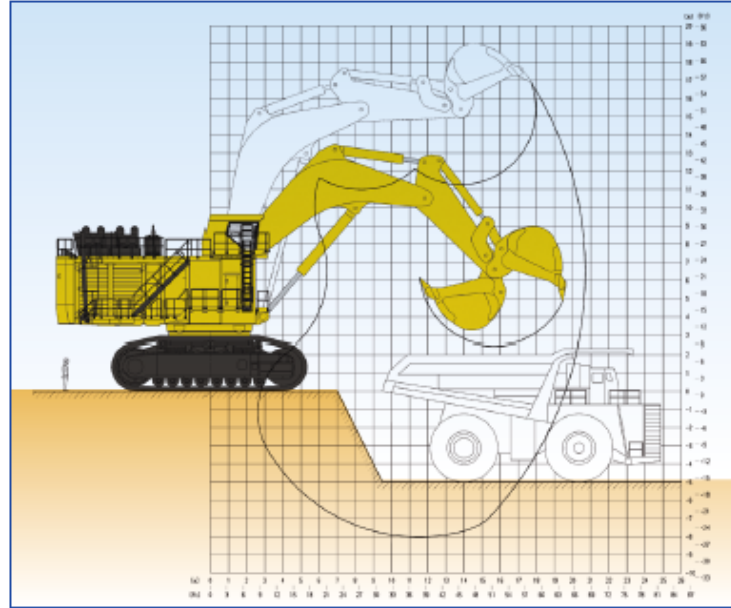
Komatsu PC8000 Shovel LED Scene Illumination

Safety Through Innovative Lighting Product

By J.W. Speaker

The Intersection of Science + Design

Komatsu PC 8000

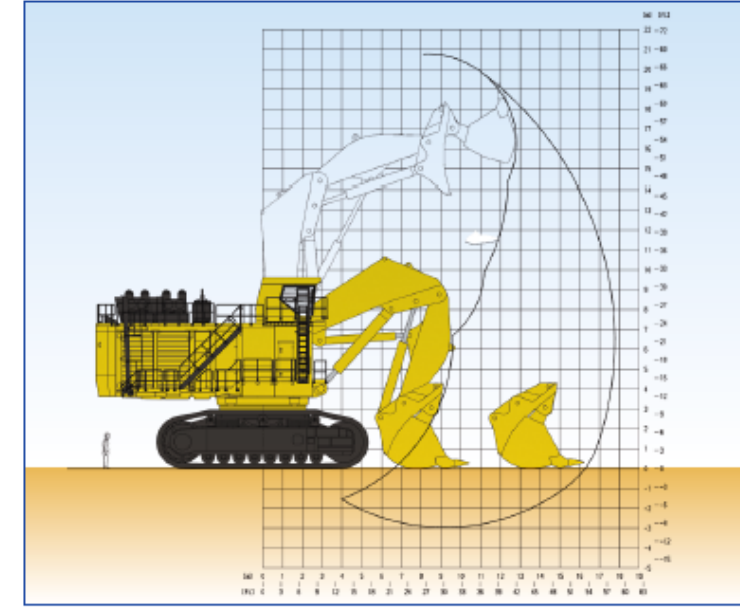


Boom length	11.500 mm	37'9"	Max. digging height	16.900 mm	55'5"
Stick length	5.500 mm	18'1"	Max. dumping height	11.200 mm	36'9"
Break-out force (ISO)	2.077 kN	466,850 lb	Max. digging depth	8.000 mm	26'3"
Tear-out force (ISO)	1.813 kN	407,510 lb	Max. digging reach	20.700 mm	67'11"
			Max. digging reach at ground level	19.600 mm	64'4"

Bucket Capacity (Heaped 1:1) SAE		Width		Teeth	Wear Package acc. abrasiveness	GET System	Max. Material Density (Loose)	
cum	cuyd	mm	feet/inch	qty			t/cum	lb/cuyd
42,0	55,0	4.575	15'0"	6	standard	Hensley XS 800 *	1,8	3,000

Alternative buckets on request

*other systems on request



Boom length	8.150 mm	26'9"	Max. cutting height	20.900 mm	68'7"
Stick length	5.750 mm	18'9"	Max. dumping height	13.900 mm	45'7"
Break-out force (ISO)	2.331 kN	523,940 lb	Max. digging depth	3.000 mm	9'10"
Crowd force (ISO)	2.353 kN	528,890 lb	Max. digging reach	17.800 mm	58'5"
			Level crowd at ground level	5.800 mm	19'0"
			Bucket opening width	3.200 mm	10'6"

Bucket Capacity (Heaped 1:2) SAE		Width		Teeth	Wear Package acc. abrasiveness	GET System	Max. Material Density (Loose)	
cum	cuyd	mm	feet/inch	qty			t/cum	lb/cuyd
28,0	37,0	4.575	15'0"	6	heavy	Hensley XS 800 *	2,8	4,700
36,0	47,0	5.375	17'8"	6	heavy	Hensley XS 800 *	2,0	3,400
42,0	55,0	5.375	17'8"	6	standard	Hensley XS 800 *	1,8	3,000

Alternative buckets on request

*other systems on request



Front View:

- ① Model 623 Wide Flood
- ① Model 623 Medium Flood

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



Left Side View:

1 Model 623 Wide Flood

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



Left Side View:

① Model 623 Wide Flood

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

Right Side View:

1 Model 623 Wide Flood

For illumination on Cab Side
Option 1





Right Side View:

① Model 623 Wide Flood

For illumination on 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 8000



Komatsu PC 8000 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 8000

Option 1

7 Model 623

360 illumination







Komatsu PC8000 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

PHOTOMETRIC SPECIFICATIONS

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

REGULATORY STANDARDS COMPLIANCE



Buy America Standards
IEC IP67
UL Recognized

Eco Friendly
IEC IP69K



Model 623

6 Wide Flood 1 Medium Flood for 24V System

Komatsu PC8000 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

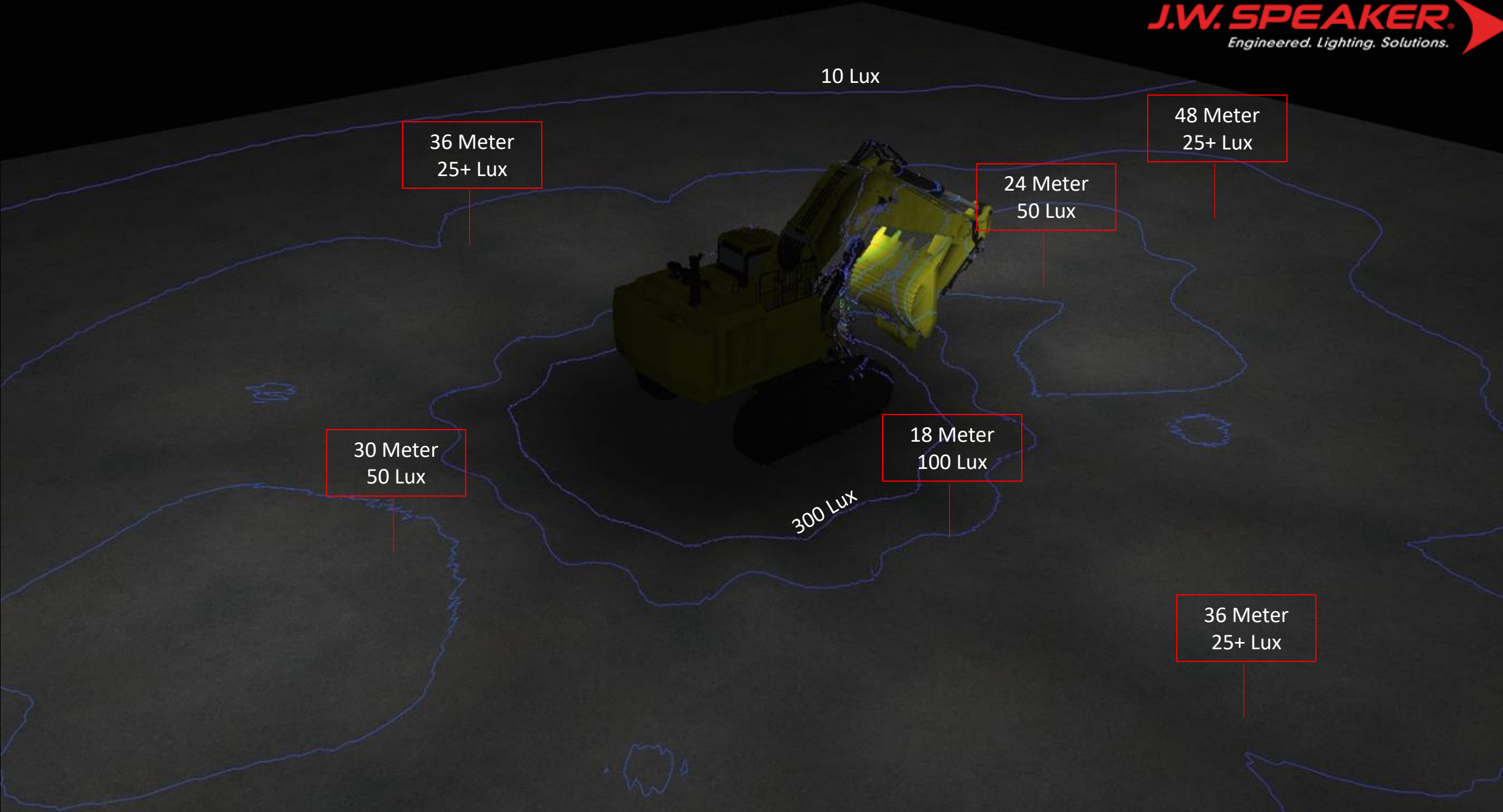
Komatsu PC 8000

Option 2

13 Model 623

Full clean illumination





10 Lux

36 Meter
25+ Lux

48 Meter
25+ Lux

24 Meter
50 Lux

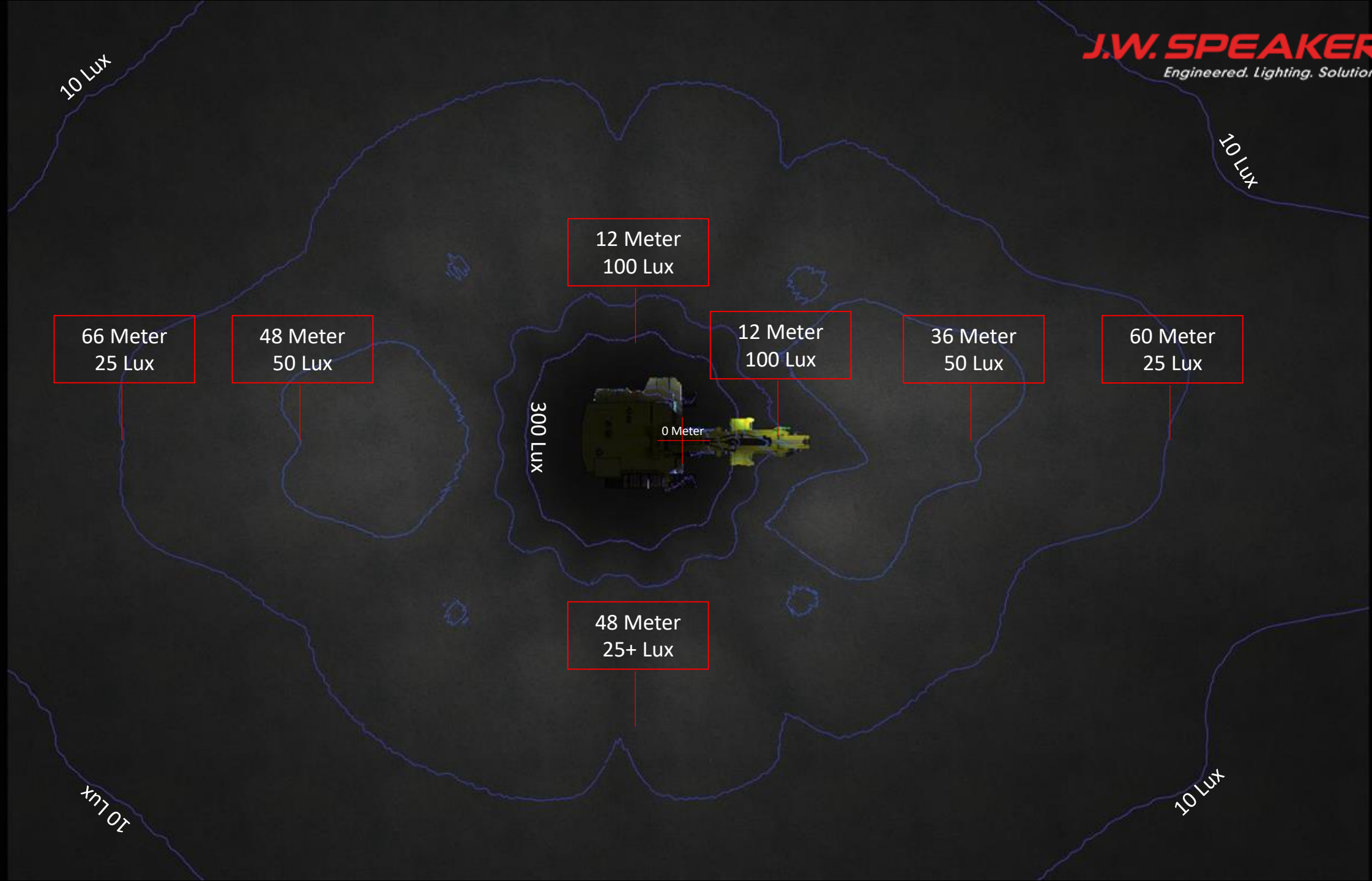
18 Meter
100 Lux

30 Meter
50 Lux

36 Meter
25+ Lux

300 Lux





10 Lux

10 Lux

12 Meter
100 Lux

66 Meter
25 Lux

48 Meter
50 Lux

12 Meter
100 Lux

36 Meter
50 Lux

60 Meter
25 Lux

300 Lux

0 Meter

48 Meter
25+ Lux

10 Lux

10 Lux



Komatsu PC8000 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

PHOTOMETRIC SPECIFICATIONS

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

REGULATORY STANDARDS COMPLIANCE



Buy America Standards
IEC IP67
UL Recognized

Eco Friendly
IEC IP69K



Model 623

12 Wide Flood 1 Medium Flood for 24V System

Komatsu PC8000 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




USA

Buy America Standards
IEC IP67



ECD

Eco Friendly
IEC IP69K



IP69K

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 PC8000 Shovel Red Zone

Safety Through Innovative Lighting Product

By **J.W. Speaker**

The Intersection of Science + Design

Komatsu PC8000 Red Zone

- 9 Model 527 LED Red No Go Zone Lamps
- 7 Mounted at 7.3m high and 35 degrees down
- 1 Mounted at 8m high 38 degrees down left side front
- 3 Left, Right and rear hand side fitted around upper deck under the hand rails.



9 Meters

18 Meters









Komatsu PC 8000 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



REGULATORY STANDARDS COMPLIANCE



Buy America Standards Eco Friendly
IEC IP69K

Model 527
9 Red Zone

Komatsu PC 8000 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

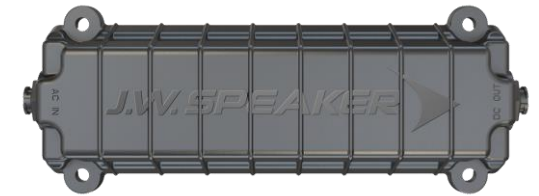


Eco Friendly
UL Recognized

IEC IP69K



AC Cable



Model 6404



AC Cable

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

P&H 4100 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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