

## LIGHTS OPTIMISATION PLAN

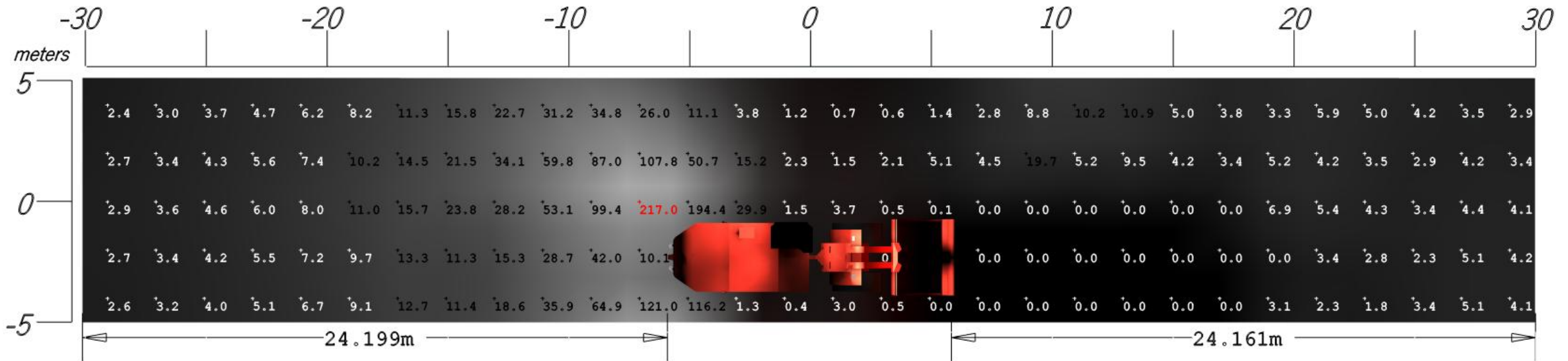
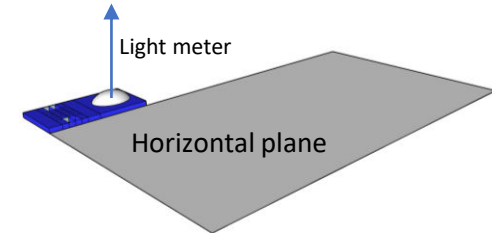
### Machine SANDVIK Toro LH518iB Loader



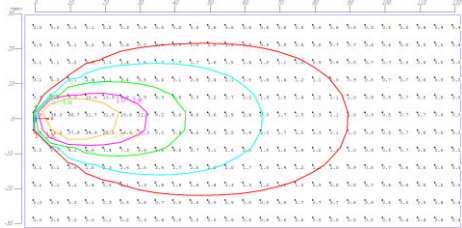


## Simulation

The simulation SANDVIK Toro LH518iB Loader set up:

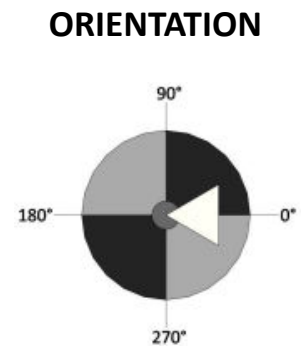
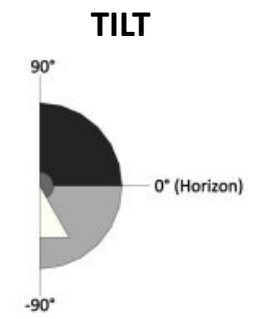
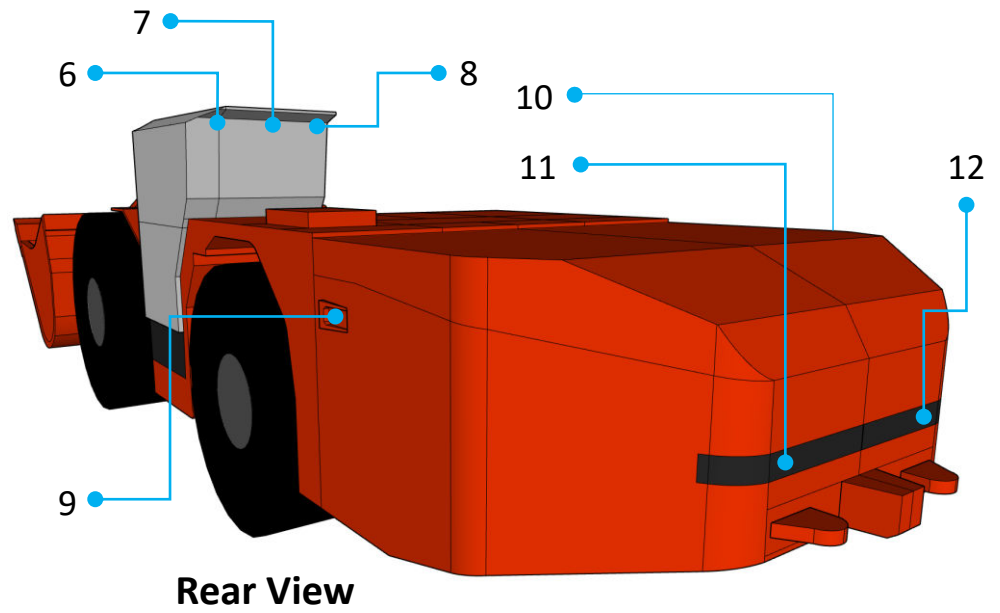
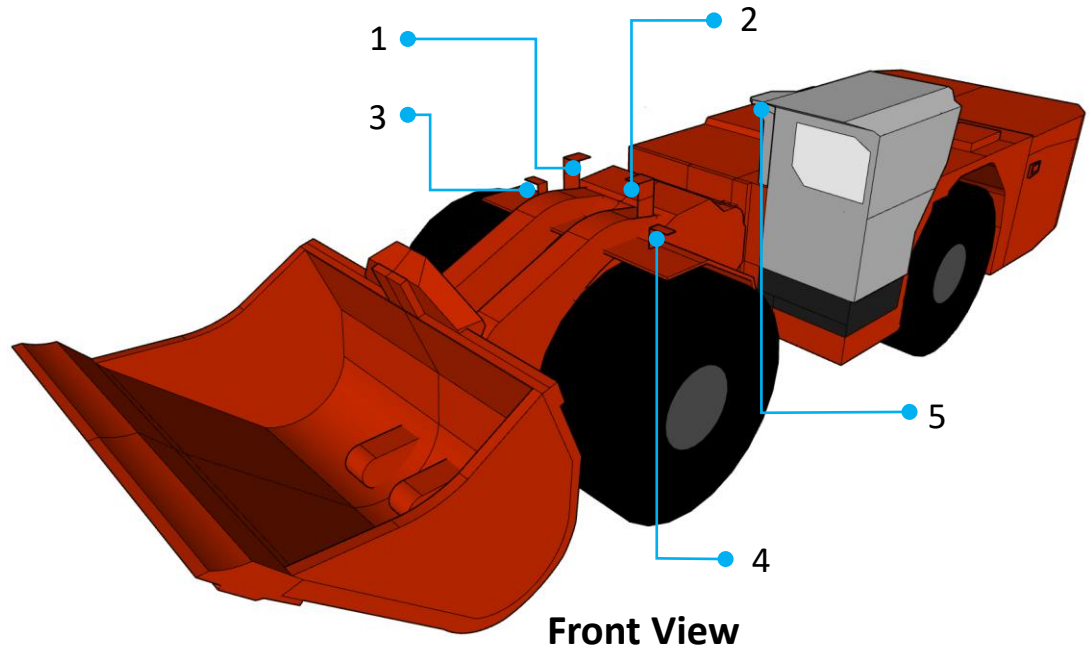
Note:



## Optimisation Package

Qty	Lights	Beam Patterns	Patent	Wattage	Lumens	Warranty
6	Heavy Duty 5000Lu LED Flood		IP68/69K	48W	5000Lu	5 Years
4	Heavy Duty 3000Lu LED Flood		IP68/69K	36W	3000Lu	5 Years
2	Heavy Duty 1500Lu LED Flood		IP68/69K	20W	1500Lu	5 Years

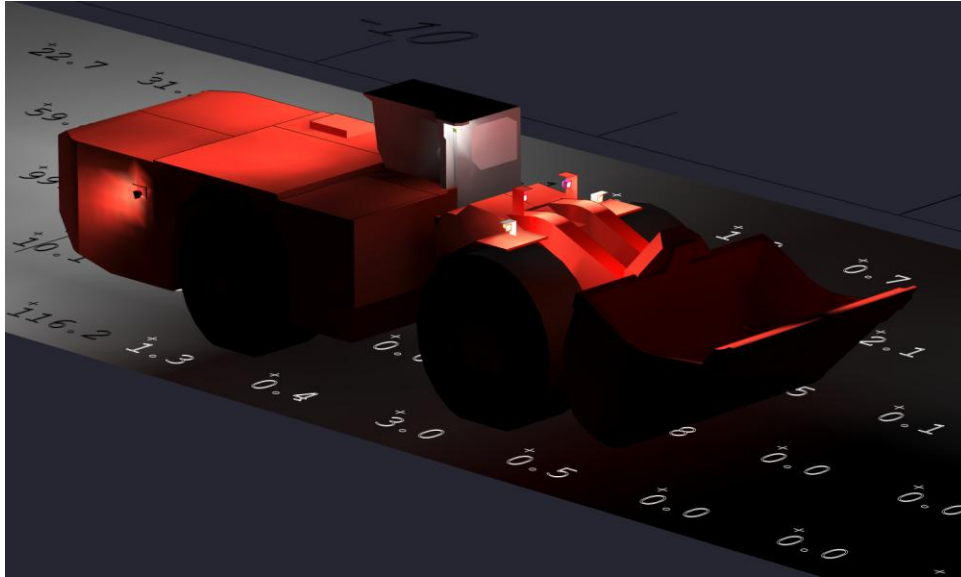
# Light Positions



<b>A</b>	Heavy Duty 5000Lu LED Flood
<b>B</b>	Heavy Duty 3000Lu LED Flood
<b>C</b>	Heavy Duty 1500Lu LED Flood

No	Orient	Tilt	Height(m)	Lights
1	355°	-5°	2.42	<b>B</b>
2	5°	-5°	2.42	<b>B</b>
3	350°	-5°	2.13	<b>A</b>
4	10°	-5°	2.13	<b>A</b>
5	0°	-5°	2.73	<b>A</b>
6	160°	-15°	2.71	<b>A</b>
7	180°	-5°	2.71	<b>A</b>
8	230°	-5°	2.71	<b>A</b>
9	160°	-20°	1.63	<b>B</b>
10	200°	-20°	1.63	<b>B</b>
11	170°	-10°	1.25	<b>C</b>
12	190°	-10°	1.25	<b>C</b>

# Simulation

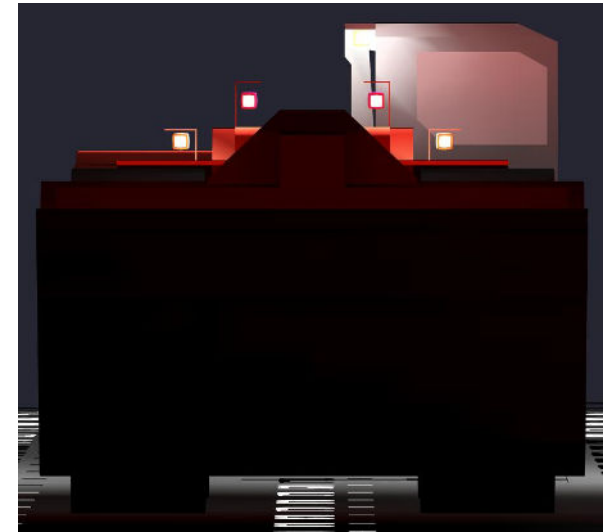
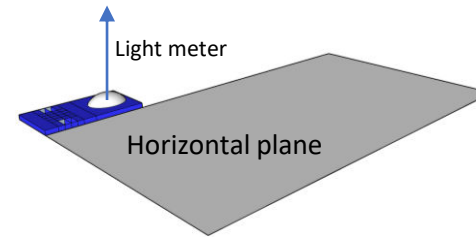


**Isometry View**

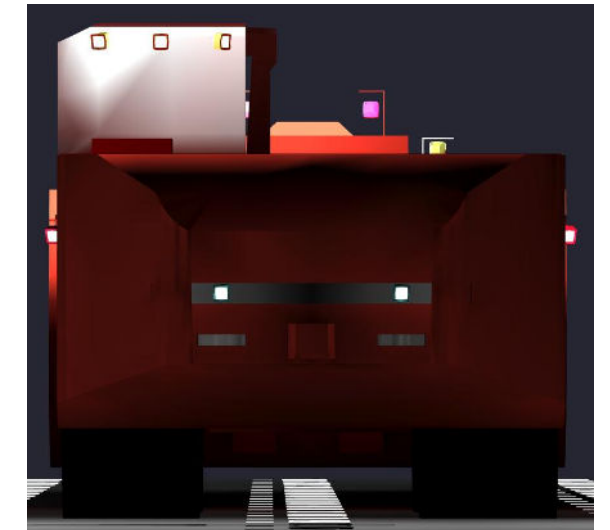
**Lighting Location Summary:**

Location	Type	ID#
Forward Work Zone Lighting	2 x HD 3000Lu LED F	1, 2
	2 x HD 5000Lu LED F	3, 4
Top Front Cabin	1 x HD 5000Lu LED F	5
Top Rear Cabin	3 x HD 5000Lu LED F	6, 7, 8
LHS Lighting	1 x HD 3000Lu LED F	9
RHS Lighting	1 x HD 3000Lu LED F	10
Rear Zone Lighting	2 x HD 1500Lu LED F	11, 12

**Note:**



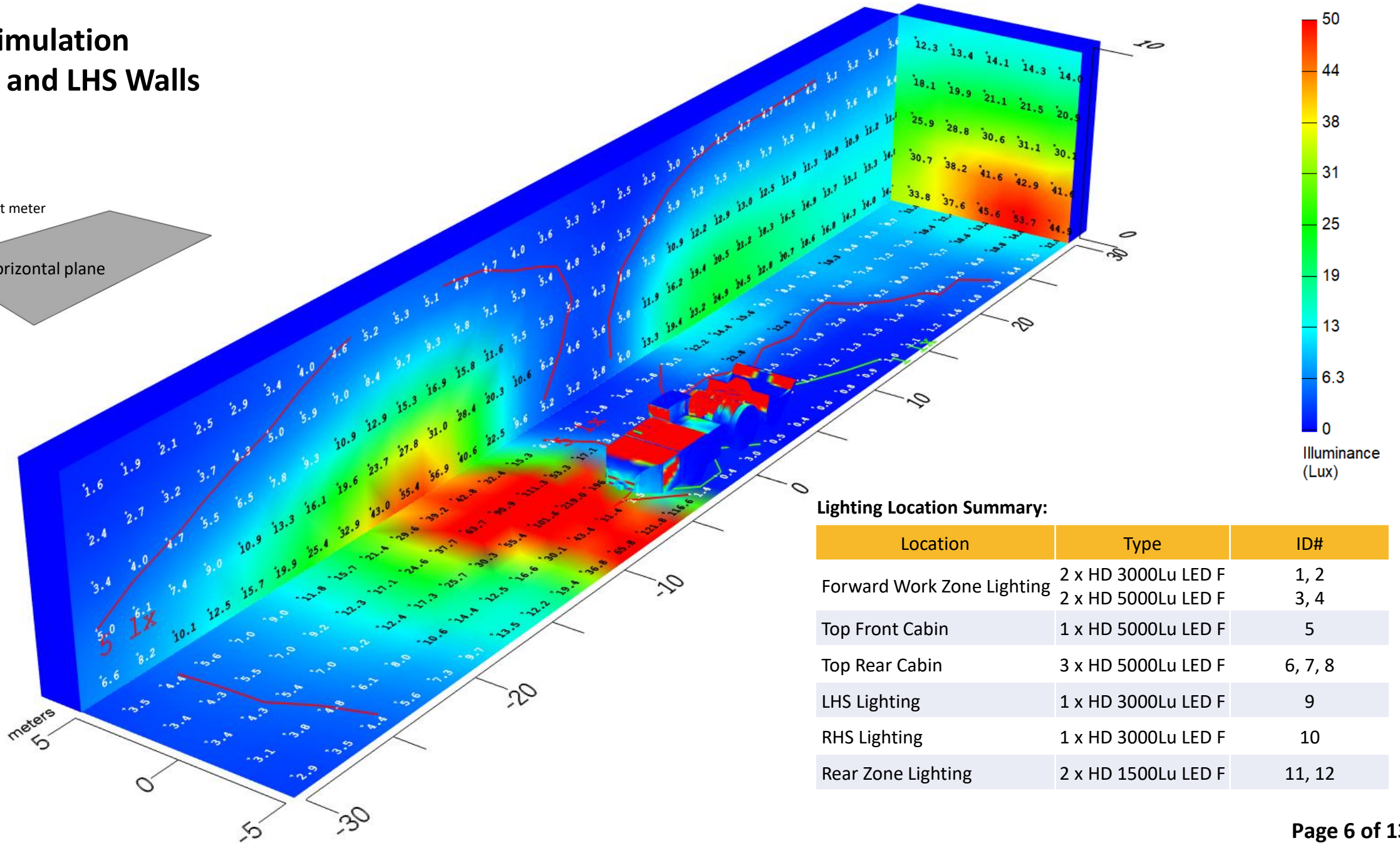
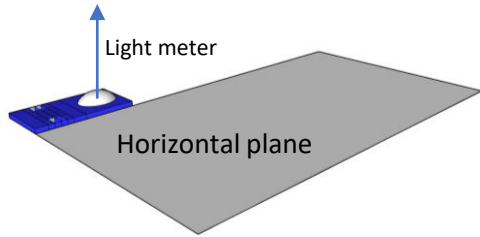
**Front View**



**Rear View**

# Lux Simulation Front and LHS Walls

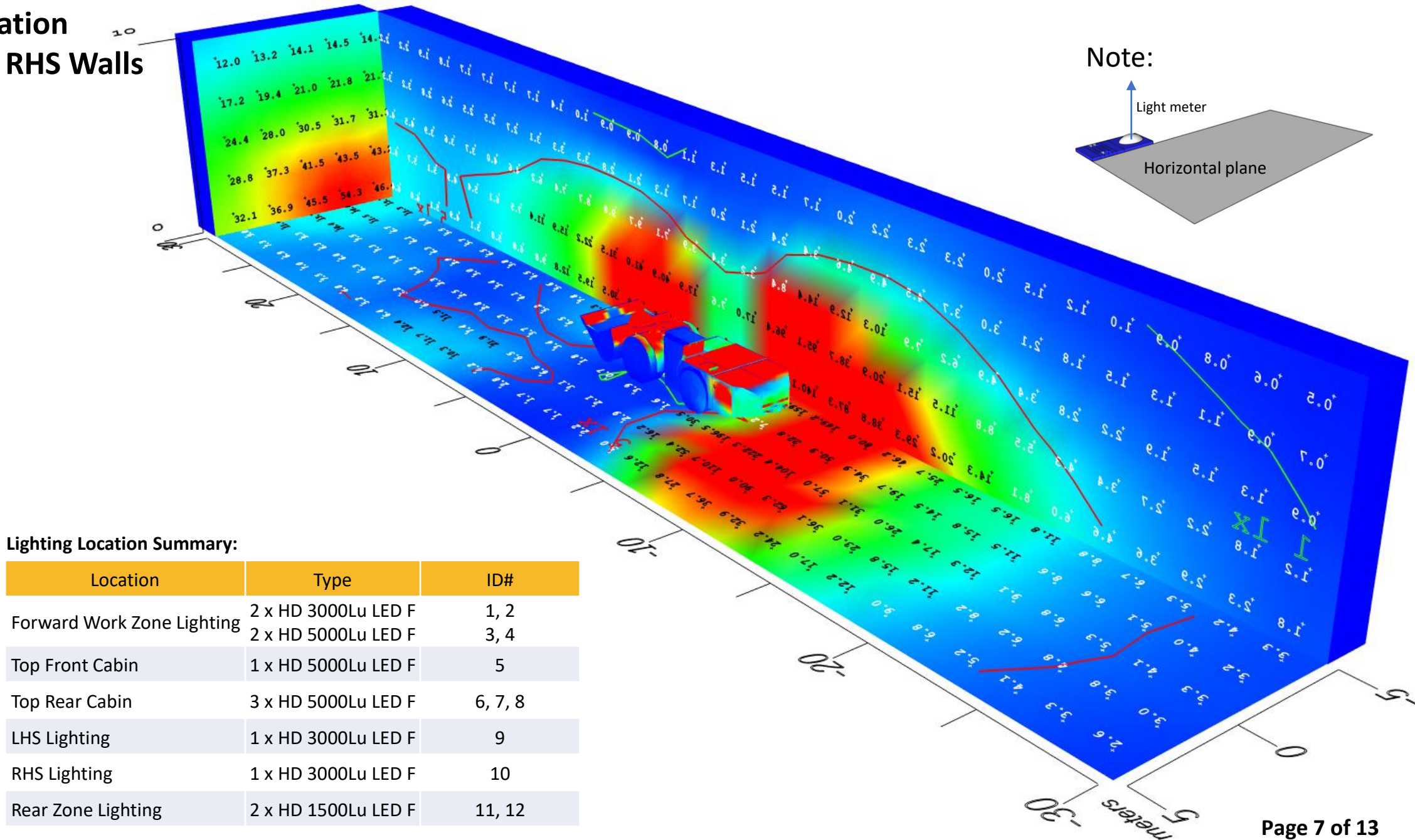
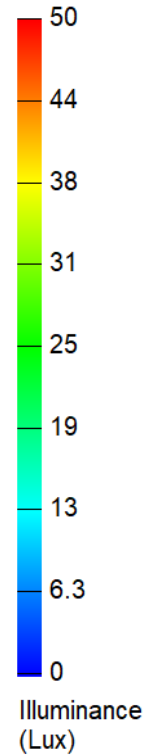
Note:



### Lighting Location Summary:

Location	Type	ID#
Forward Work Zone Lighting	2 x HD 3000Lu LED F	1, 2
	2 x HD 5000Lu LED F	3, 4
Top Front Cabin	1 x HD 5000Lu LED F	5
Top Rear Cabin	3 x HD 5000Lu LED F	6, 7, 8
LHS Lighting	1 x HD 3000Lu LED F	9
RHS Lighting	1 x HD 3000Lu LED F	10
Rear Zone Lighting	2 x HD 1500Lu LED F	11, 12

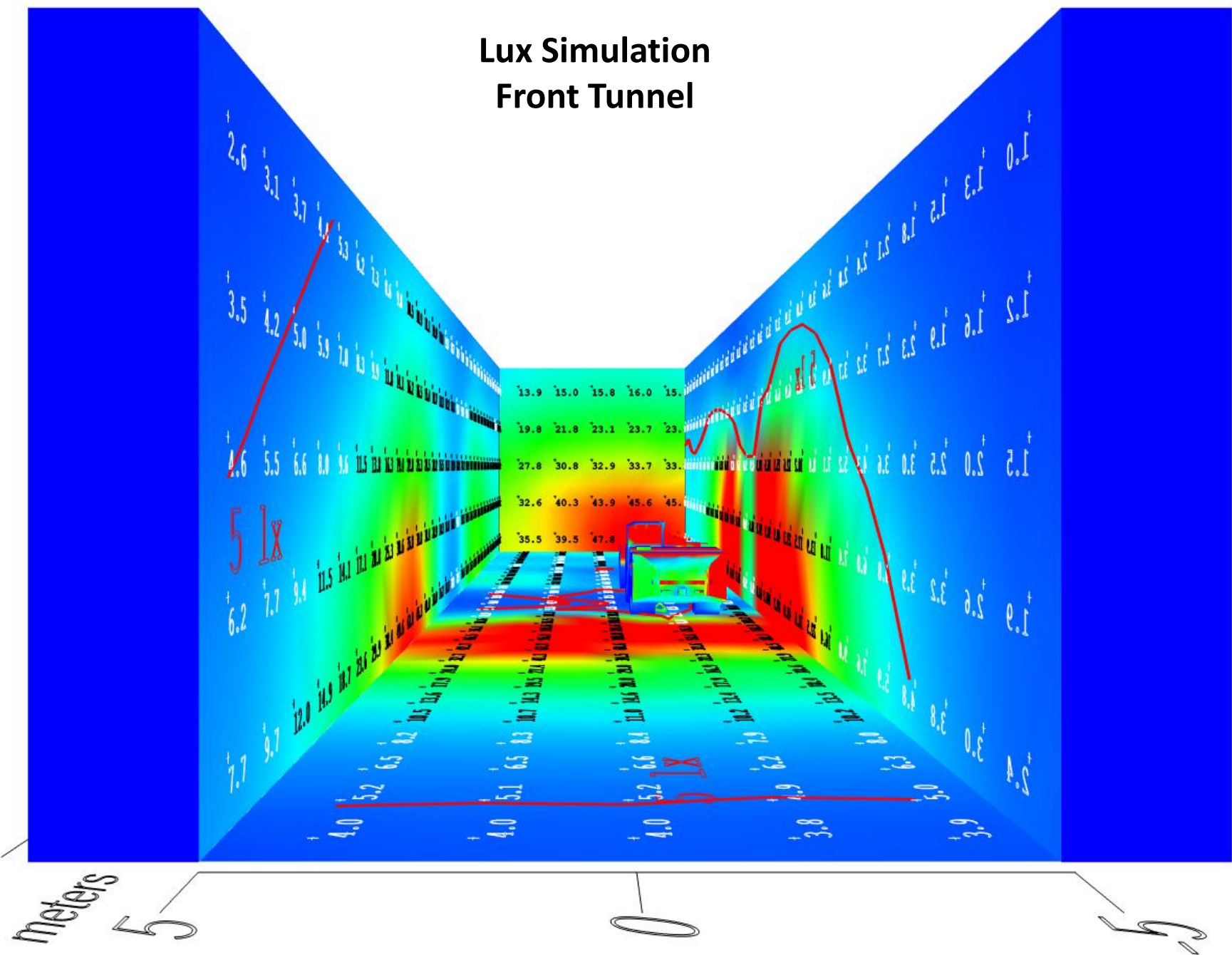
# Lux Simulation Front and RHS Walls



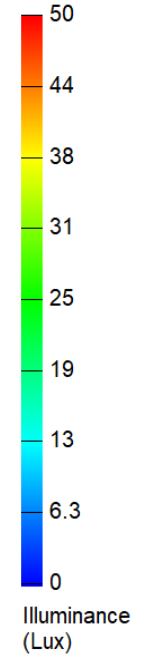
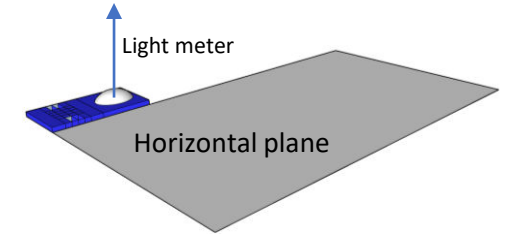
## Lighting Location Summary:

Location	Type	ID#
Forward Work Zone Lighting	2 x HD 3000Lu LED F	1, 2
	2 x HD 5000Lu LED F	3, 4
Top Front Cabin	1 x HD 5000Lu LED F	5
Top Rear Cabin	3 x HD 5000Lu LED F	6, 7, 8
LHS Lighting	1 x HD 3000Lu LED F	9
RHS Lighting	1 x HD 3000Lu LED F	10
Rear Zone Lighting	2 x HD 1500Lu LED F	11, 12

# Lux Simulation Front Tunnel

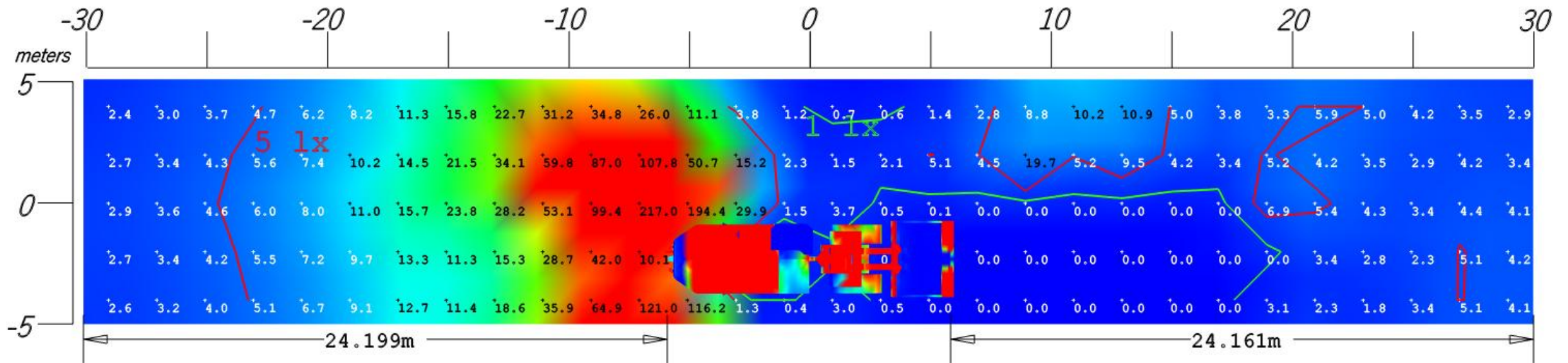


Note:



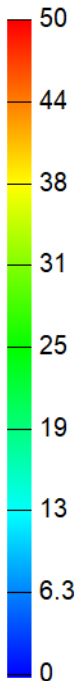
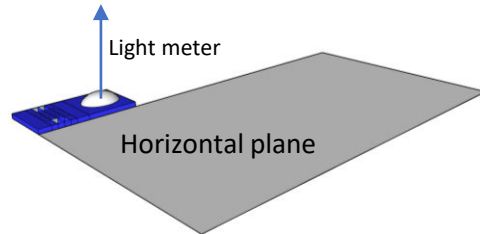
## Lighting Location Summary:

Location	Type	ID#
Forward Work Zone Lighting	2 x HD 3000Lu LED F 2 x HD 5000Lu LED F	1, 2 3, 4
Top Front Cabin	1 x HD 5000Lu LED F	5
Top Rear Cabin	3 x HD 5000Lu LED F	6, 7, 8
LHS Lighting	1 x HD 3000Lu LED F	9
RHS Lighting	1 x HD 3000Lu LED F	10
Rear Zone Lighting	2 x HD 1500Lu LED F	11, 12



## Lux Simulation Top View

Note:



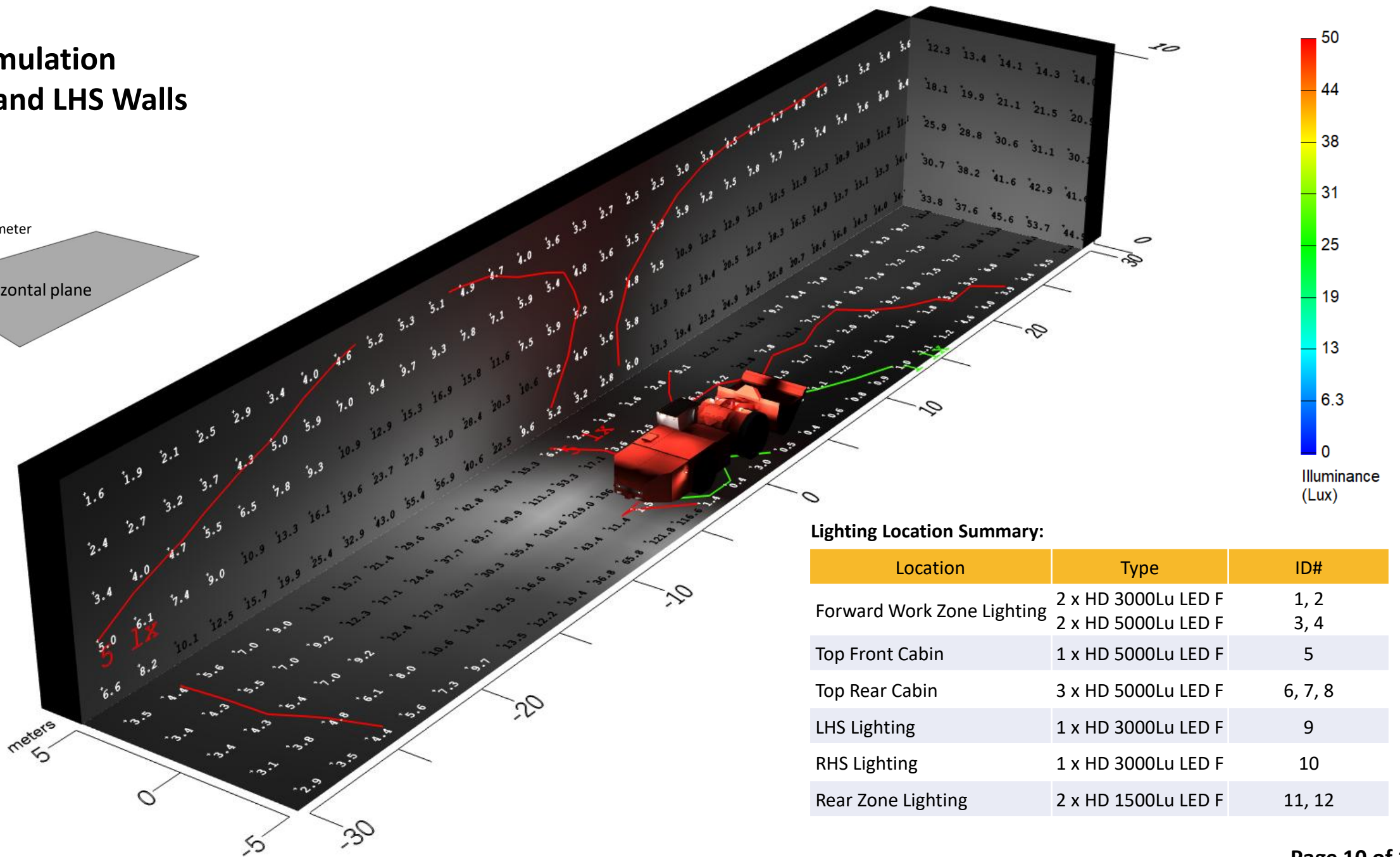
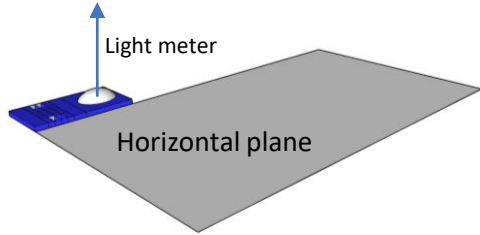
Illuminance  
(Lux)

### Lighting Location Summary:

Location	Type	ID#
Forward Work Zone Lighting	2 x HD 3000Lu LED F	1, 2
	2 x HD 5000Lu LED F	3, 4
Top Front Cabin	1 x HD 5000Lu LED F	5
Top Rear Cabin	3 x HD 5000Lu LED F	6, 7, 8
LHS Lighting	1 x HD 3000Lu LED F	9
RHS Lighting	1 x HD 3000Lu LED F	10
Rear Zone Lighting	2 x HD 1500Lu LED F	11, 12

# Lux Simulation Front and LHS Walls

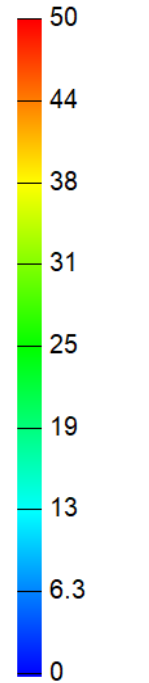
Note:



## Lighting Location Summary:

Location	Type	ID#
Forward Work Zone Lighting	2 x HD 3000Lu LED F	1, 2
	2 x HD 5000Lu LED F	3, 4
Top Front Cabin	1 x HD 5000Lu LED F	5
Top Rear Cabin	3 x HD 5000Lu LED F	6, 7, 8
LHS Lighting	1 x HD 3000Lu LED F	9
RHS Lighting	1 x HD 3000Lu LED F	10
Rear Zone Lighting	2 x HD 1500Lu LED F	11, 12

# Lux Simulation Front and RHS Walls

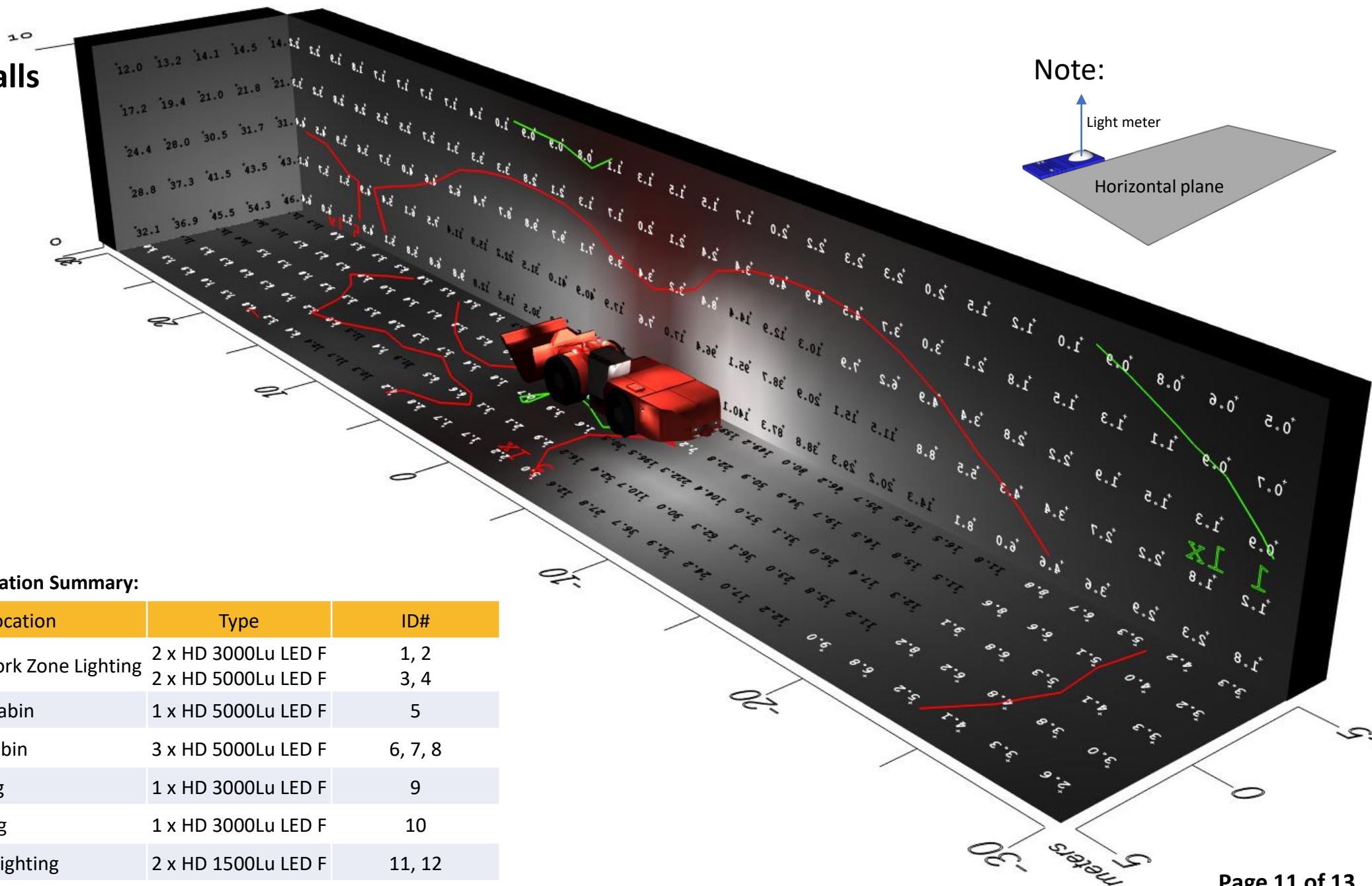
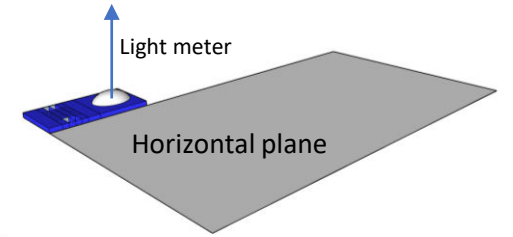


Illuminance (Lux)

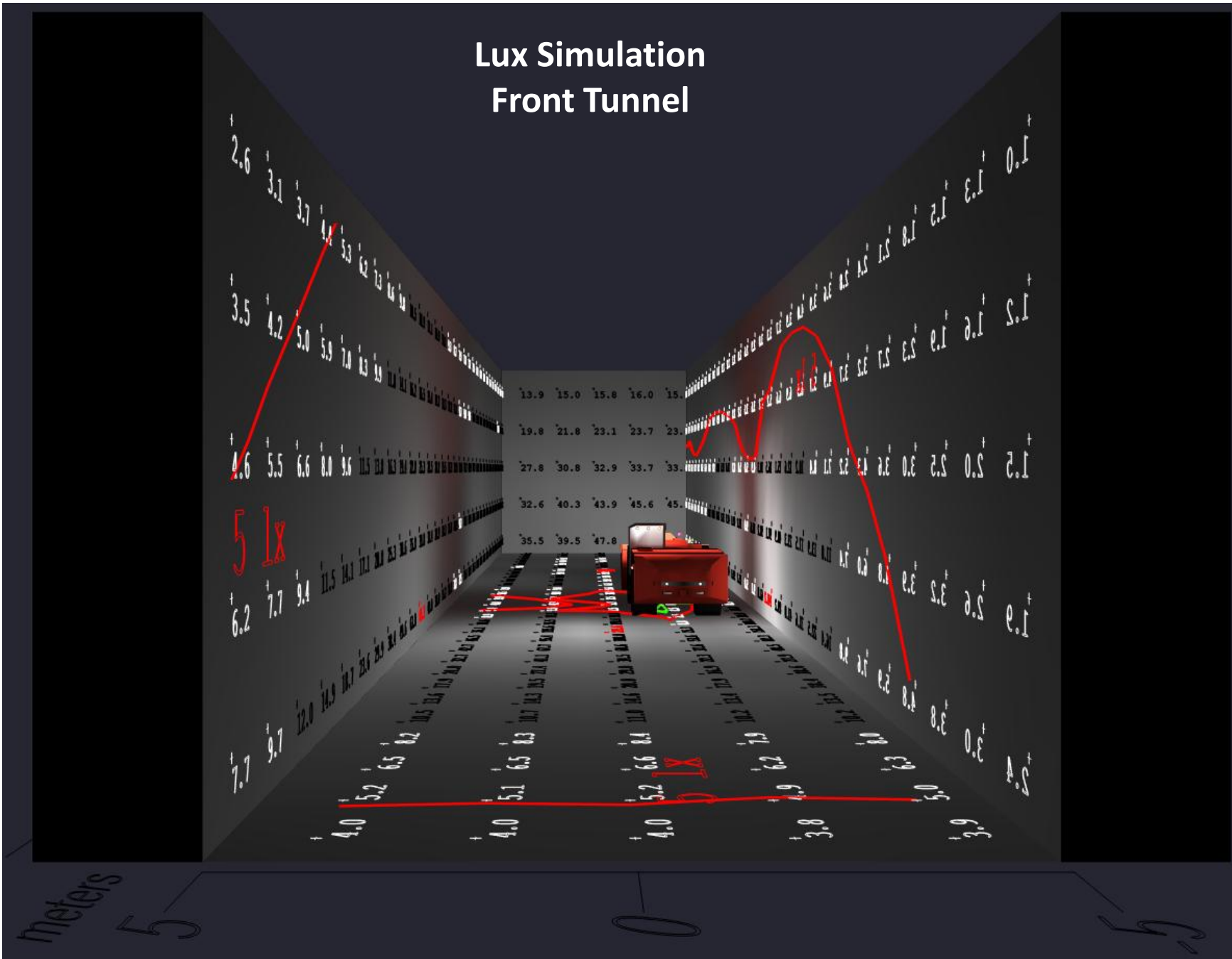
## Lighting Location Summary:

Location	Type	ID#
Forward Work Zone Lighting	2 x HD 3000Lu LED F	1, 2
	2 x HD 5000Lu LED F	3, 4
Top Front Cabin	1 x HD 5000Lu LED F	5
Top Rear Cabin	3 x HD 5000Lu LED F	6, 7, 8
LHS Lighting	1 x HD 3000Lu LED F	9
RHS Lighting	1 x HD 3000Lu LED F	10
Rear Zone Lighting	2 x HD 1500Lu LED F	11, 12

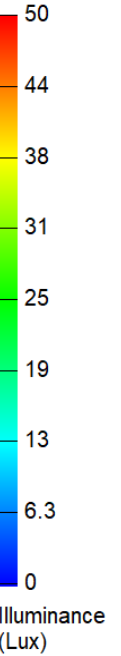
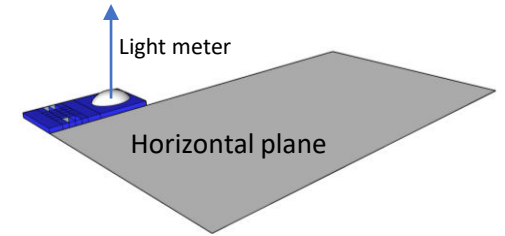
Note:



# Lux Simulation Front Tunnel



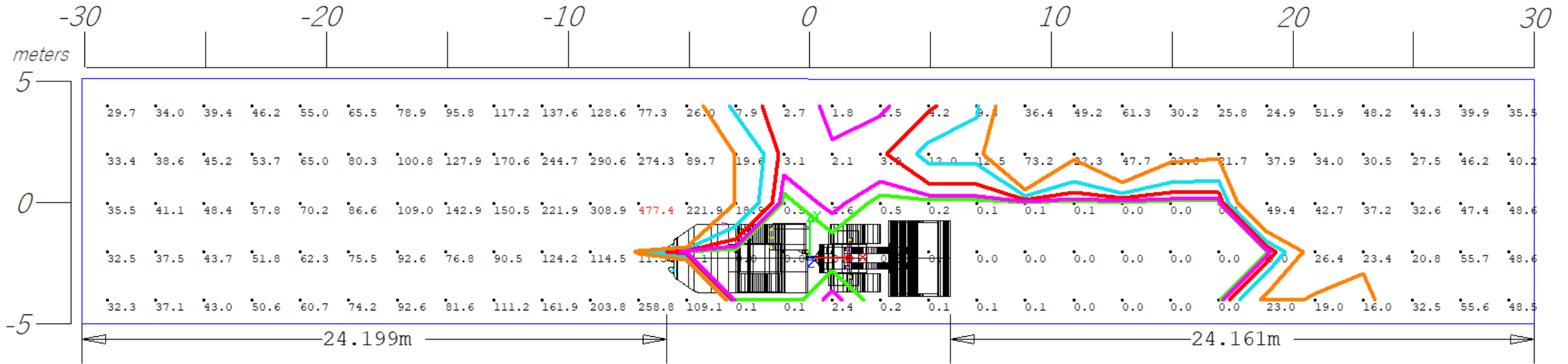
Note:



## Lighting Location Summary:

Location	Type	ID#
Forward Work Zone Lighting	2 x HD 3000Lu LED F 2 x HD 5000Lu LED F	1, 2 3, 4
Top Front Cabin	1 x HD 5000Lu LED F	5
Top Rear Cabin	3 x HD 5000Lu LED F	6, 7, 8
LHS Lighting	1 x HD 3000Lu LED F	9
RHS Lighting	1 x HD 3000Lu LED F	10
Rear Zone Lighting	2 x HD 1500Lu LED F	11, 12

# Iso Lux Lines



Top view of the SANDVIK Toro LH518iB Loader is in the picture on this page.

Lux point values and Isolux lines are calculated from light meter placed vertically to the ground level and all pointing towards the source of the light.

Different lux values are represented by each color: 1 lux, 2 lux, 5 lux, 10 lux, and 20 lux.

- 1 lux
- 2 lux
- 5 lux
- 10 lux
- 20 lux

