

# Comune di Quarrata - Via Lippi (allegato A)

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**Standard** EN 13201 : 2015

**Designer** Studio Tecnico

**Date** 22/03/2022

**Application** Ulysse 3.5.2

**Description** Verifica Illuminotecnica Via Lippi

Categoria M3 : strada urbana di quartiere

Teceo 1 32led 900mA 90W ottica 5141

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## 1. Fixtures

### 1.1. TECEO GEN2 1 32 LEDs 900mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532

Type TECEO GEN2 1

Reflector 5141

Source 32 LEDs 900mA WW730

Protector Piano, Vetro extra chiaro, Liscio

Source flux 12,319 klm

G\* 3

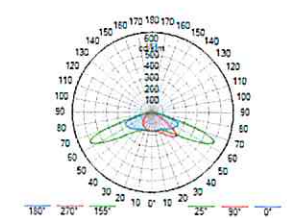
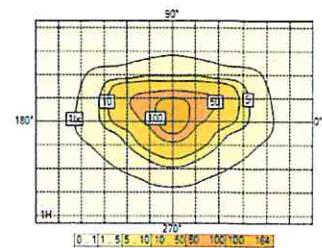
Luminaire wattage 91,0 W

MF 0,80

Matrix 468532

Luminaire flux 10,119 klm

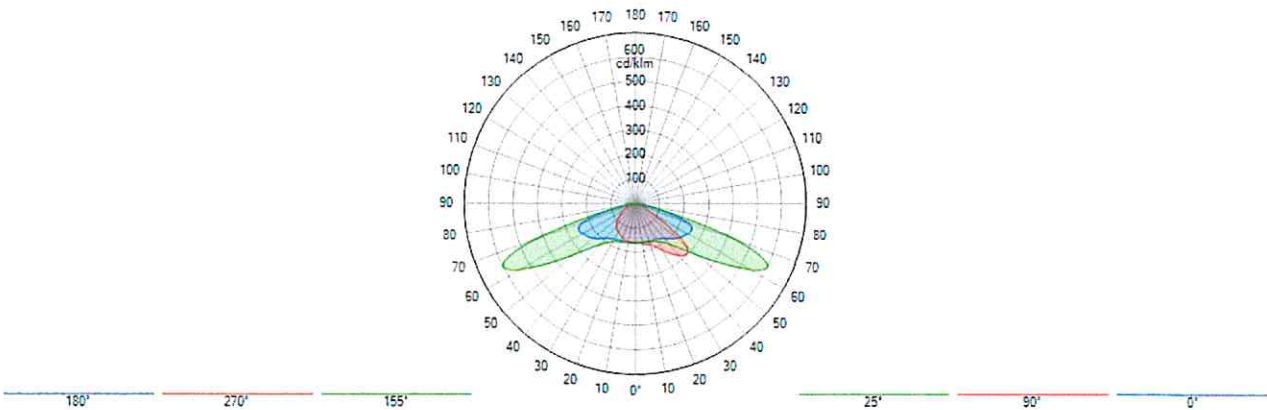
Efficacy 111 lm/W



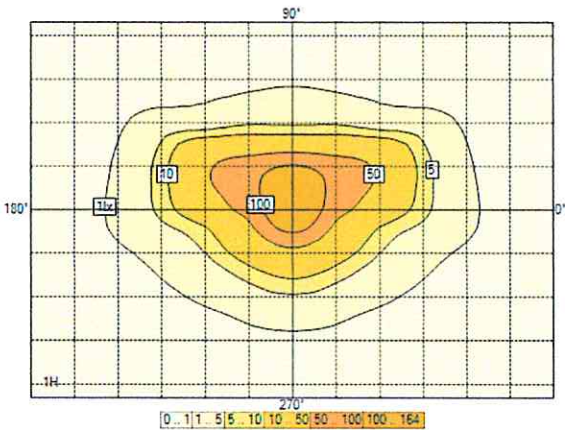
2. Photometric documents

2.1. TECEO GEN2 1 32 LEDs 900mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532

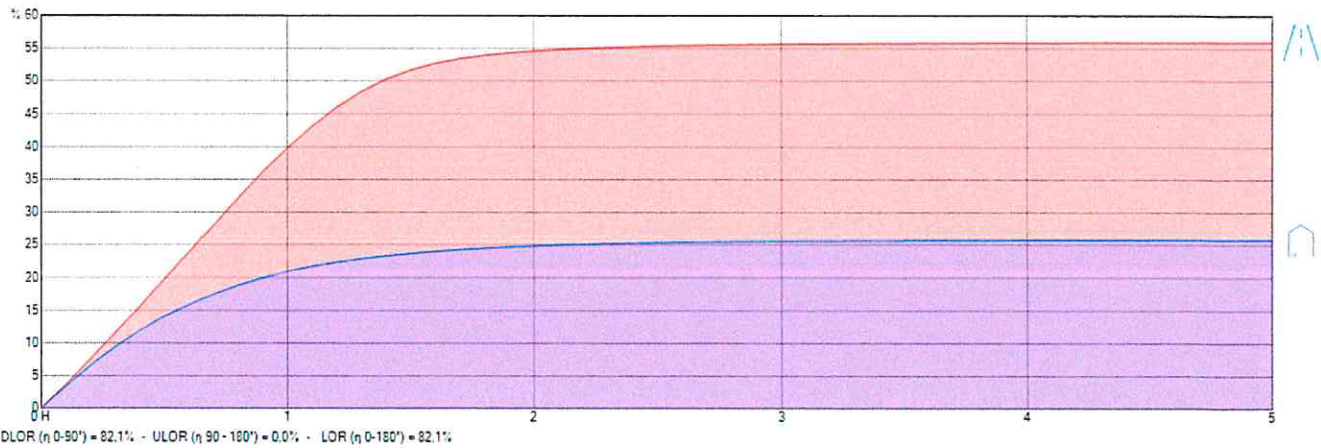
Polar/Cartesian diagram



Isolux



Utilization curve



### 3. Results

#### 3.1. Grid summary

##### Multi-lanes (LU)

M3 (LU : Ave = 1,00 cd/m<sup>2</sup> Uo = 40 % UI = 60 % UoW = 15 % TI : 15 % EIR : 0,30)

1.1 Luminance - RTable - C2007

	Ave (A) (cd/m <sup>2</sup> )	Min/Ave (%)	Min/Max (%)	Min (cd/m <sup>2</sup> )	Max (cd/m <sup>2</sup> )	UL (%)
Dynamic cross section - Observer 1 (-60,00; -5,00; 1,50)	1,10	54	36	0,60	1,68	74 %



1.2 Luminance - RTable - C2007

	Ave (A) (cd/m <sup>2</sup> )	Min/Ave (%)	Min/Max (%)	Min (cd/m <sup>2</sup> )	Max (cd/m <sup>2</sup> )	UL (%)
Dynamic cross section - Observer 1 (-60,00; -5,00; 1,50)	1,10	54	36	0,60	1,68	74 %



##### Multi-lanes (LU) (1)

M3 (LU : Ave = 1,00 cd/m<sup>2</sup> Uo = 40 % UI = 60 % UoW = 15 % TI : 15 % EIR : 0,30)

1.1 Luminance - RTable - C2007

	Ave (A) (cd/m <sup>2</sup> )	Min/Ave (%)	Min/Max (%)	Min (cd/m <sup>2</sup> )	Max (cd/m <sup>2</sup> )	UL (%)
Dynamic cross section - Observer 1 (-60,00; -18,50; 1,50)	1,01	48	28	0,49	1,72	71 %



1.2 Luminance - RTable - C2007

	Ave (A) (cd/m <sup>2</sup> )	Min/Ave (%)	Min/Max (%)	Min (cd/m <sup>2</sup> )	Max (cd/m <sup>2</sup> )	UL (%)
Dynamic cross section - Observer 1 (-60,00; -18,50; 1,50)	1,01	48	28	0,49	1,72	71 %



#### 3.2. Observer summary

##### Multi-lanes (TI 1)

M3 (LU : Ave = 1,00 cd/m<sup>2</sup> Uo = 40 % UI = 60 % UoW = 15 % TI : 15 % EIR : 0,30)

	TI
Dynamic cross section - Direction (0,0)	9



##### Multi-lanes (TI 1) (1)

M3 (LU : Ave = 1,00 cd/m<sup>2</sup> Uo = 40 % UI = 60 % UoW = 15 % TI : 15 % EIR : 0,30)

	TI
Dynamic cross section - Direction (0,0)	9



#### 3.3. Values summary

##### EIR road

M3 (LU : Ave = 1,00 cd/m<sup>2</sup> Uo = 40 % UI = 60 % UoW = 15 % TI : 15 % EIR : 0,30)

	EIR road
Dynamic cross section - Multi-lanes (EIR)	0,34
Dynamic cross section - Multi-lanes (EIR) (1)	0,15



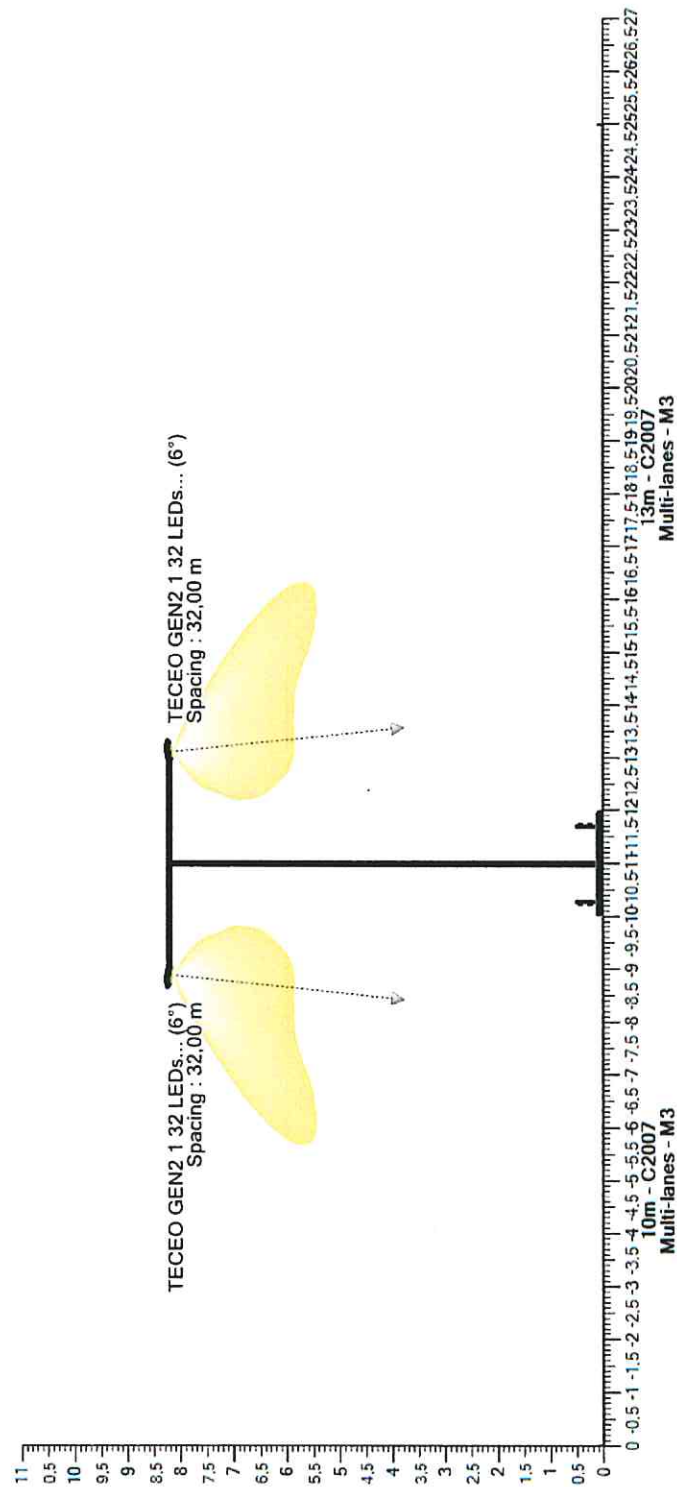
### 4. Power consumption

#### 4.1. Dynamic cross section

Fixture	Current [mA]	Qty	Dimming	Power / Fixture	Total
TECEO GEN2 1 32 LEDs 900mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	900	63	100 %	91 W	5714 W

5. Cross section



5.1. 2D View

















## 6. Dynamic cross section


### 6.1. Matrix description

Ph. color	Description	Current [mA]	Source flux [klm]	Luminaires flux [klm]	Power [W]	Efficacy [lm/W]	MF	Height [m]	Fixture
	TECEO GEN2 1 32 LEDs 900mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	900	12,319	10,119	91,4	111	0,800	12 x 8,20	

### 6.2. Luminaire positions

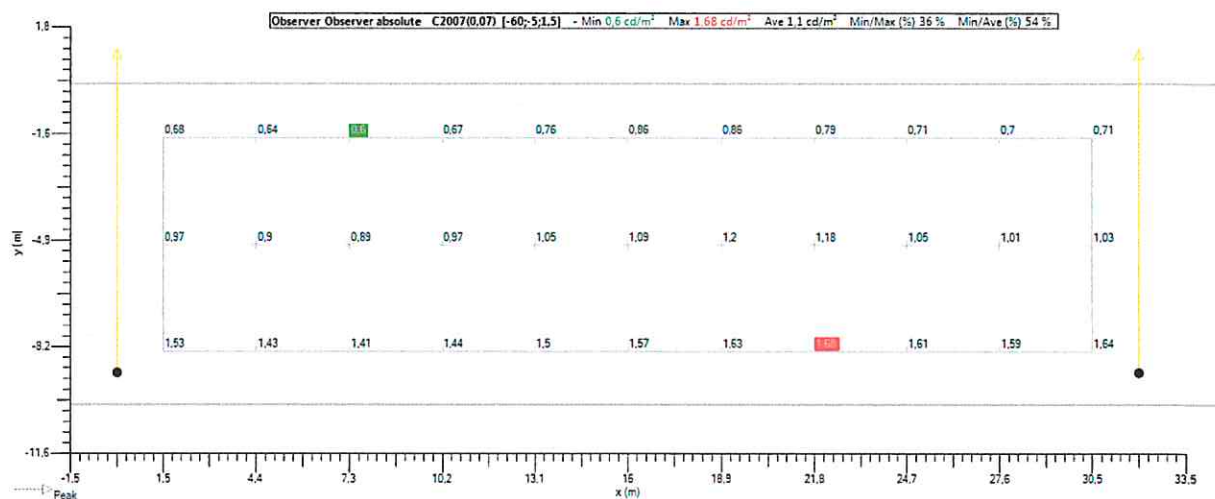
	Color	N°	Position			Luminaire							Target		
			X [m]	Y [m]	Z [m]	Name	Current [mA]	Az [°]	Incl [°]	Rot [°]	Flux [klm]	MF	X [m]	Y [m]	Z [m]
<input checked="" type="checkbox"/>		1	-32,00	-13,00	8,20	TECEO GEN2 1 32 LEDs 900mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	180,0	6,0	0,0	12,319	0,800	-32,00	-13,86	0,00
<input checked="" type="checkbox"/>		2	-32,00	-9,00	8,20	TECEO GEN2 1 32 LEDs 900mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	0,0	6,0	0,0	12,319	0,800	-32,00	-8,14	0,00
<input checked="" type="checkbox"/>		3	0,00	-13,00	8,20	TECEO GEN2 1 32 LEDs 900mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	180,0	6,0	0,0	12,319	0,800	0,00	-13,86	0,00
<input checked="" type="checkbox"/>		4	0,00	-9,00	8,20	TECEO GEN2 1 32 LEDs 900mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	0,0	6,0	0,0	12,319	0,800	0,00	-8,14	0,00
<input checked="" type="checkbox"/>		5	32,00	-13,00	8,20	TECEO GEN2 1 32 LEDs 900mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	180,0	6,0	0,0	12,319	0,800	32,00	-13,86	0,00
<input checked="" type="checkbox"/>		6	32,00	-9,00	8,20	TECEO GEN2 1 32 LEDs 900mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	0,0	6,0	0,0	12,319	0,800	32,00	-8,14	0,00
<input checked="" type="checkbox"/>		7	64,00	-13,00	8,20	TECEO GEN2 1 32 LEDs 900mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	180,0	6,0	0,0	12,319	0,800	64,00	-13,86	0,00
<input checked="" type="checkbox"/>		8	64,00	-9,00	8,20	TECEO GEN2 1 32 LEDs 900mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	0,0	6,0	0,0	12,319	0,800	64,00	-8,14	0,00
<input checked="" type="checkbox"/>		9	96,00	-13,00	8,20	TECEO GEN2 1 32 LEDs 900mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	180,0	6,0	0,0	12,319	0,800	96,00	-13,86	0,00
<input checked="" type="checkbox"/>		10	96,00	-9,00	8,20	TECEO GEN2 1 32 LEDs 900mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	0,0	6,0	0,0	12,319	0,800	96,00	-8,14	0,00
<input checked="" type="checkbox"/>		11	128,00	-13,00	8,20	TECEO GEN2 1 32 LEDs 900mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	180,0	6,0	0,0	12,319	0,800	128,00	-13,86	0,00
<input checked="" type="checkbox"/>		12	128,00	-9,00	8,20	TECEO GEN2 1 32 LEDs 900mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	0,0	6,0	0,0	12,319	0,800	128,00	-8,14	0,00

### 6.3. Luminaire groups

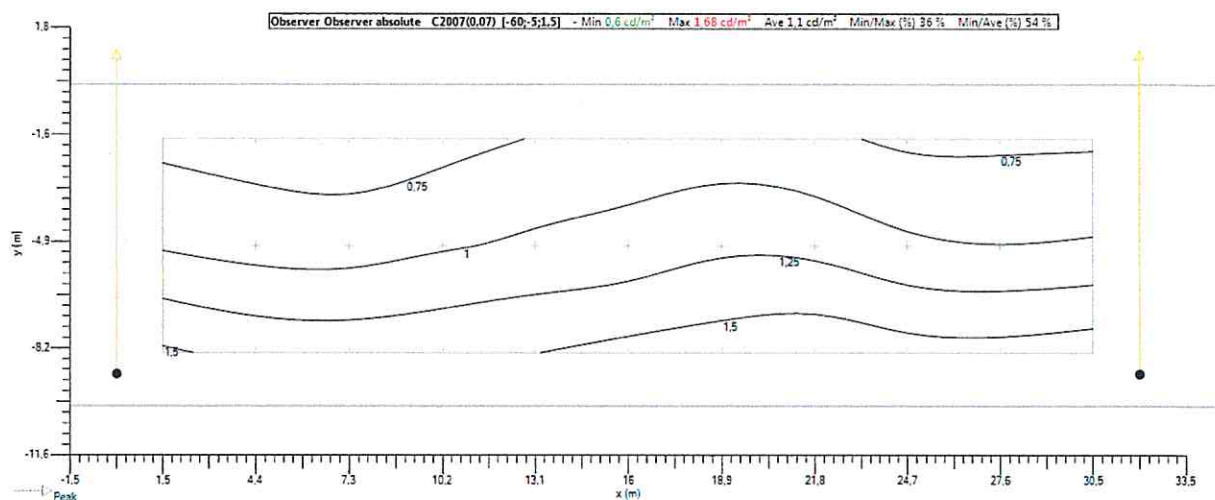
Twin													
	Color	N°	Position			Luminaire					Rotation		
			X [m]	Y [m]	Z [m]	Name	Az [°]	Incl [°]	Rot [°]	Dim [%]	X [°]	Y [°]	Z [°]
<input checked="" type="checkbox"/>		1	-32,00	-13,00	8,20	Fixture twin	0,0	6,0	0,0	100	0,0	0,0	0,0

## 6.4. Multi-lanes (LU) - Luminance RTable - Absolute 1

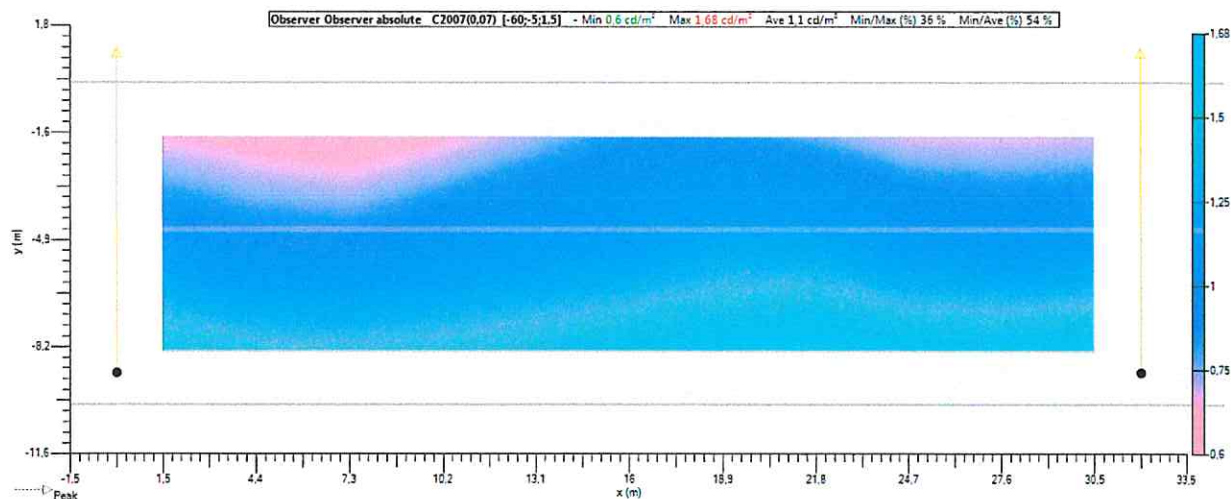
### Values



### Isolevel



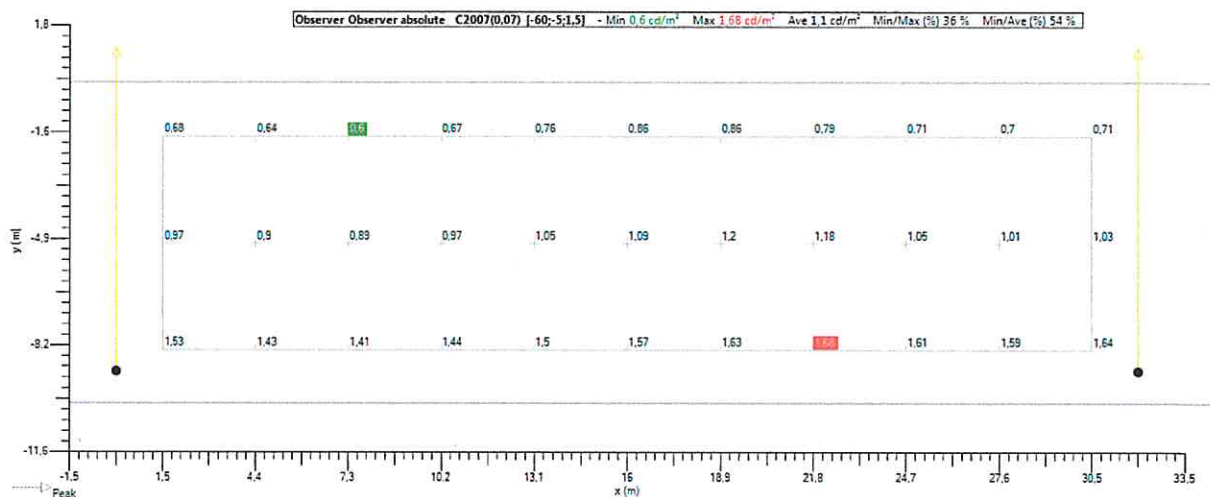
### Shading



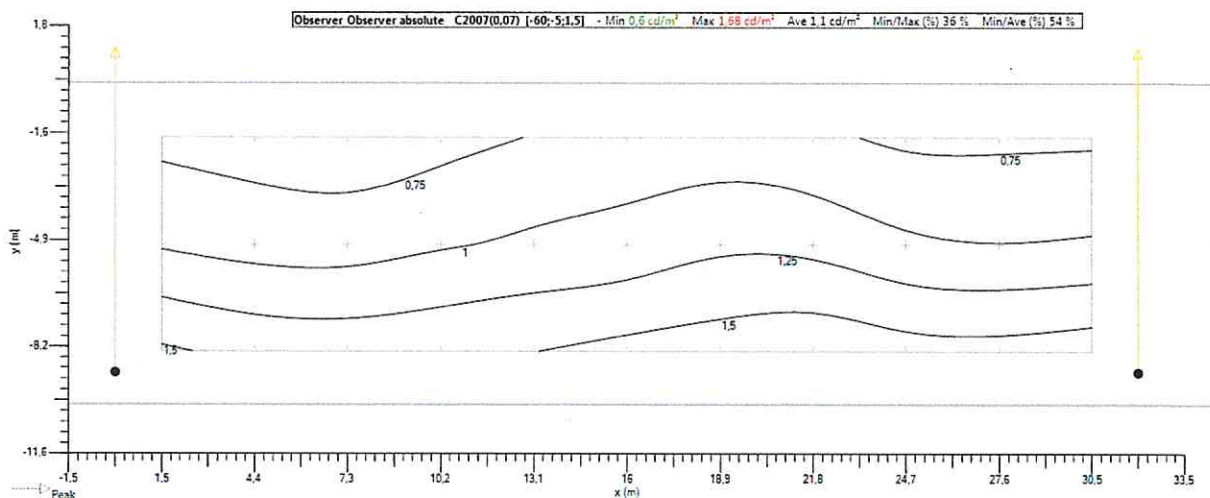


## 6.5. Multi-lanes (LU) - Luminance RTable - Optional - Absolute 1

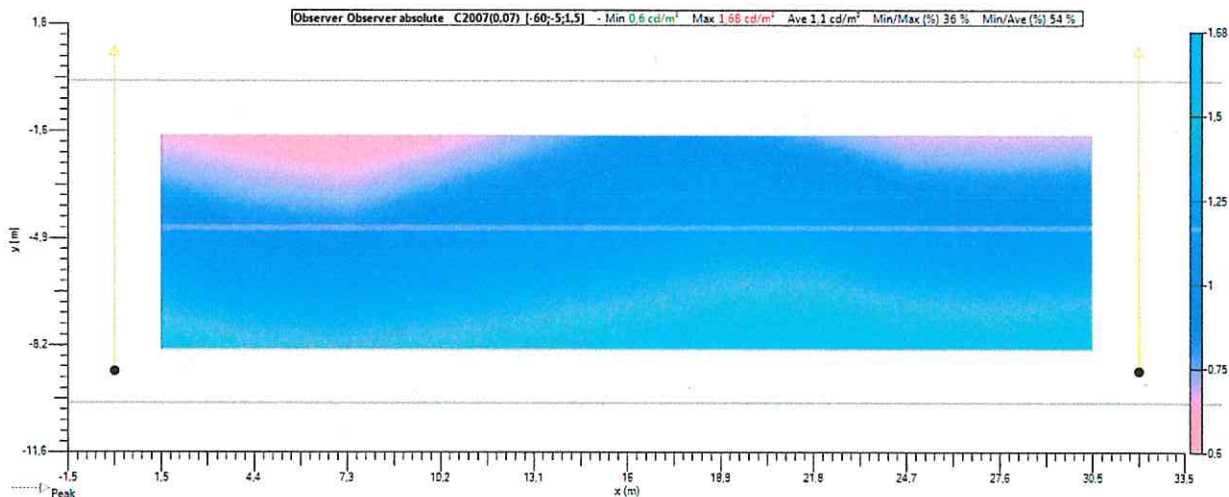
### Values



### Isolevel

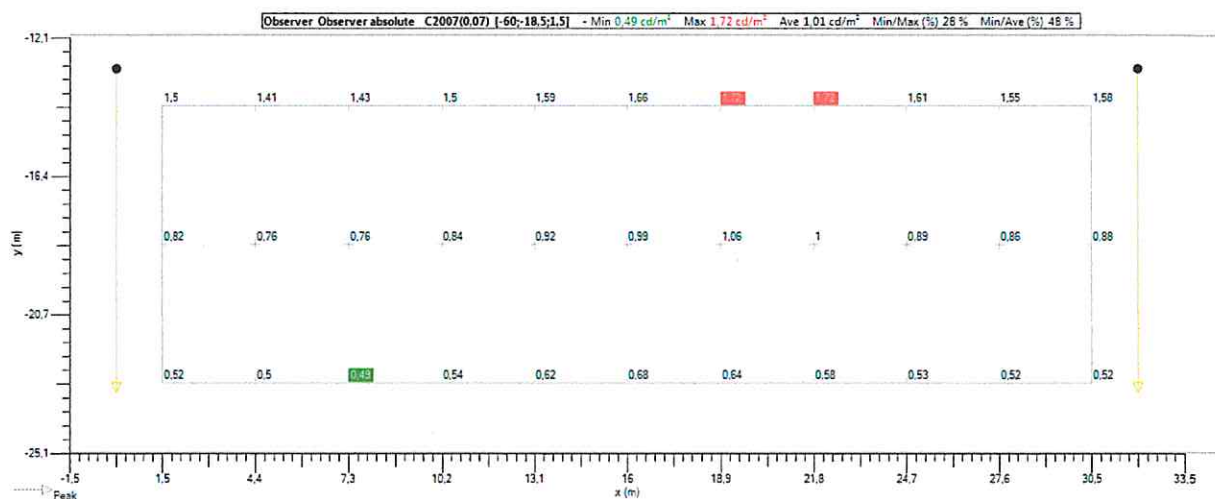


### Shading

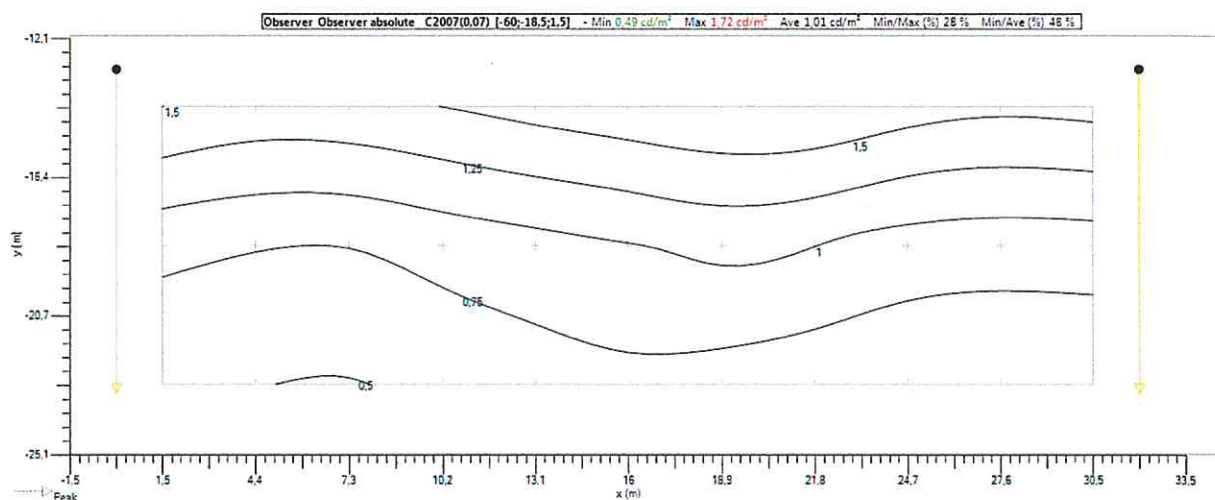


## 6.6. Multi-lanes (LU) (1) - Luminance RTable - Absolute 1

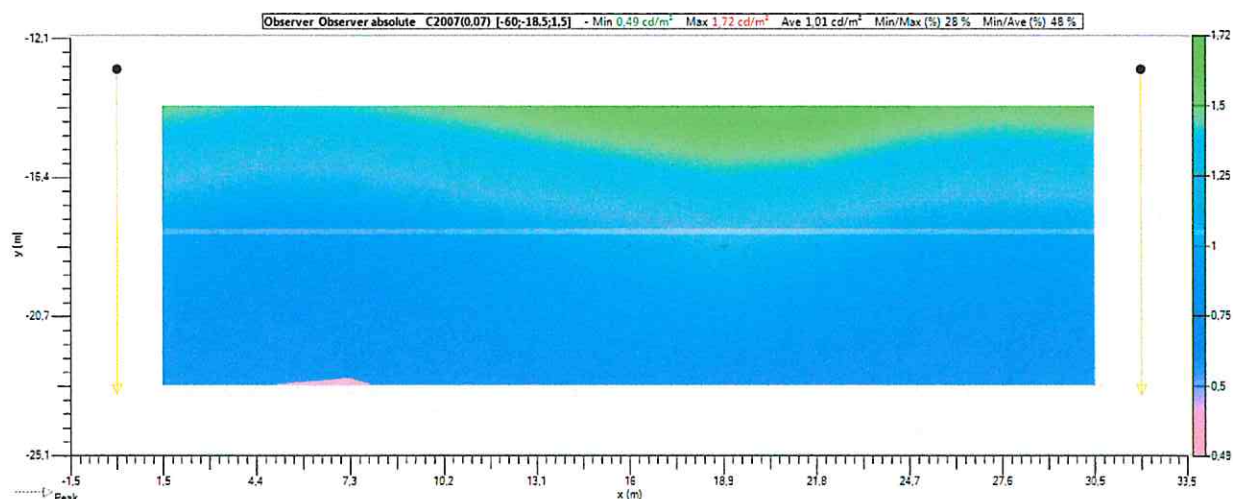
### Values



### Isolevel

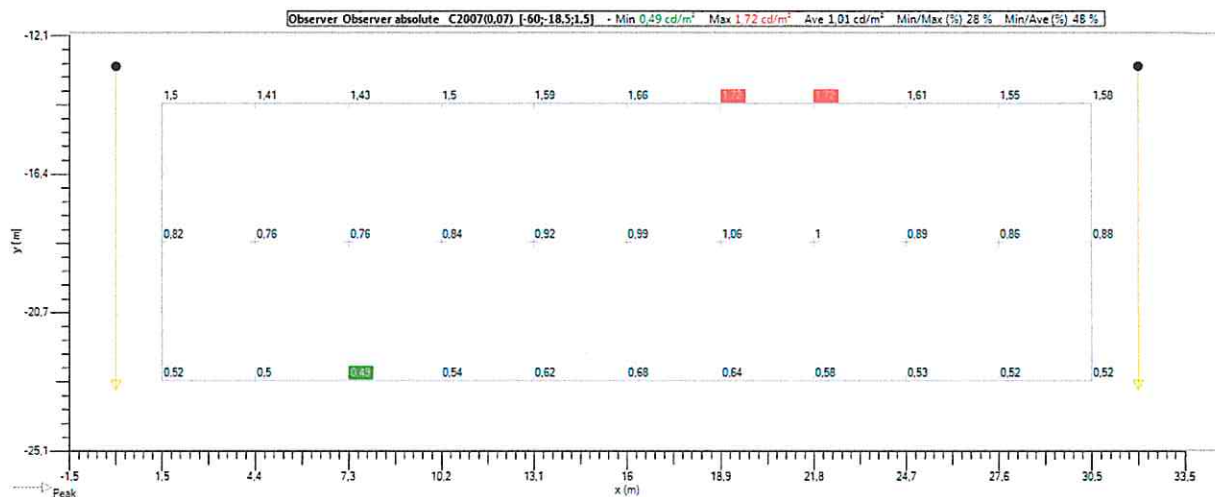


### Shading

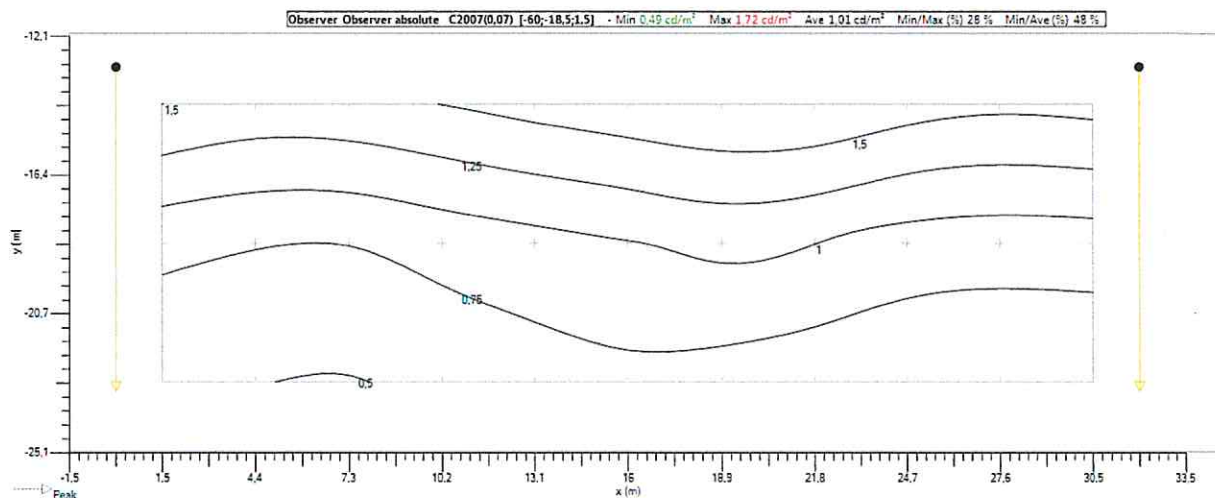


## 6.7. Multi-lanes (LU) (1) - Luminance RTable - Optional - Absolute 1

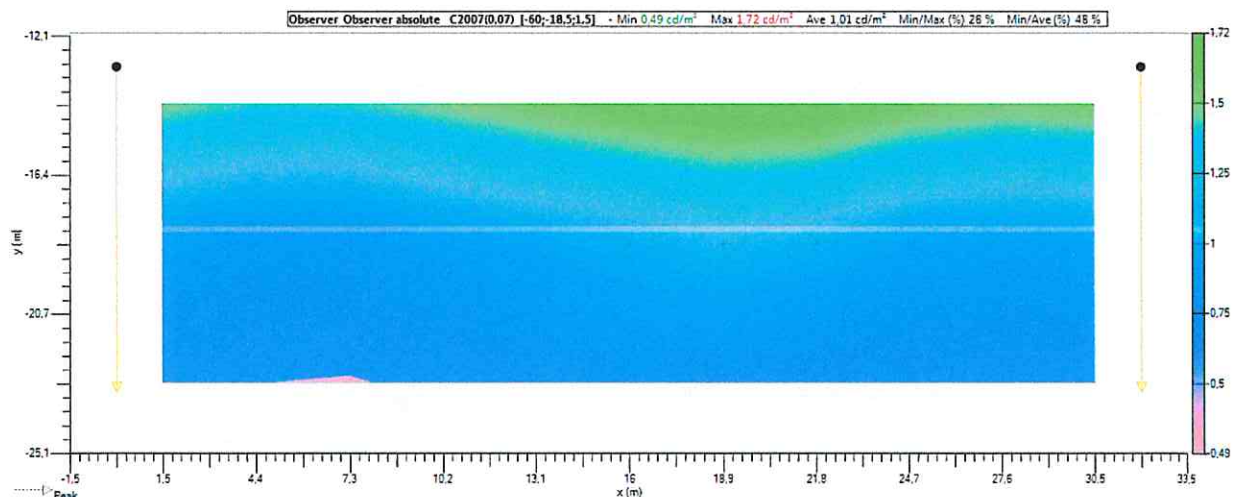
### Values



### Isolevel

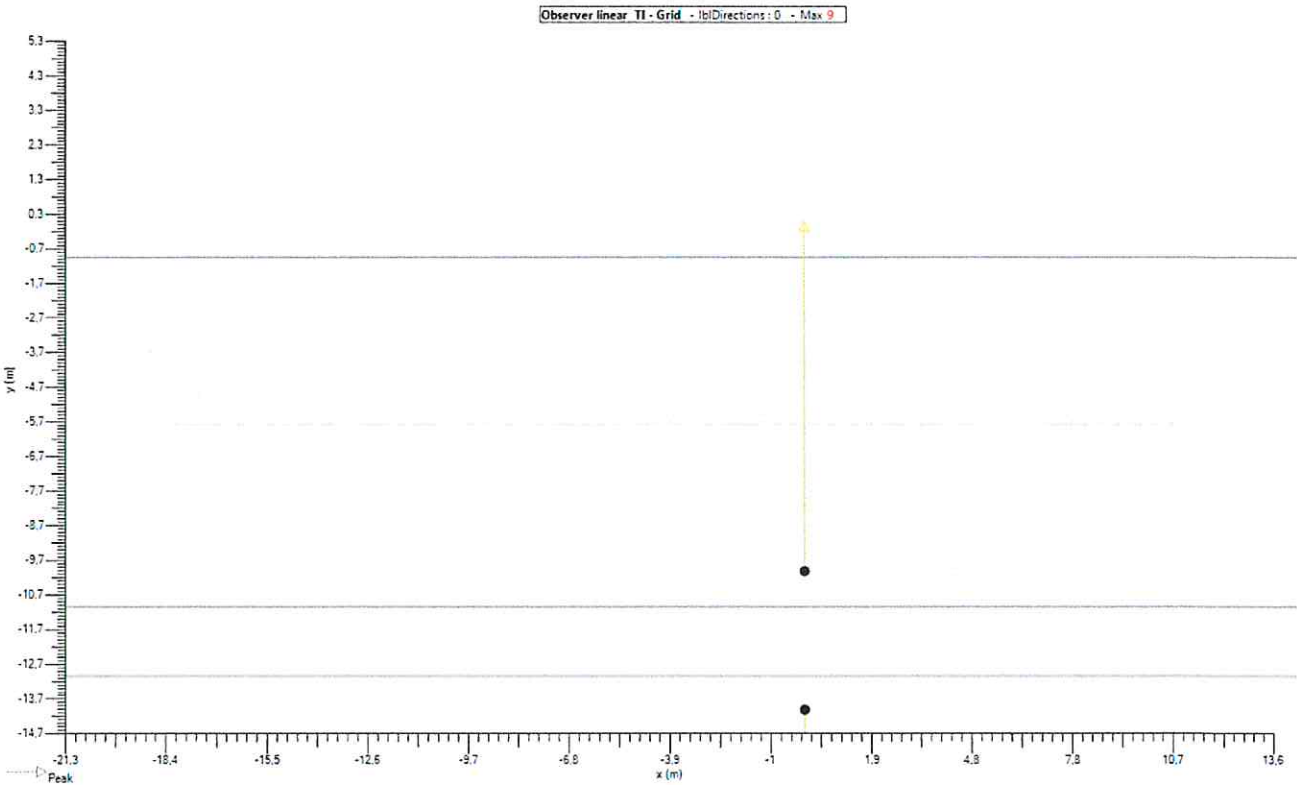


### Shading

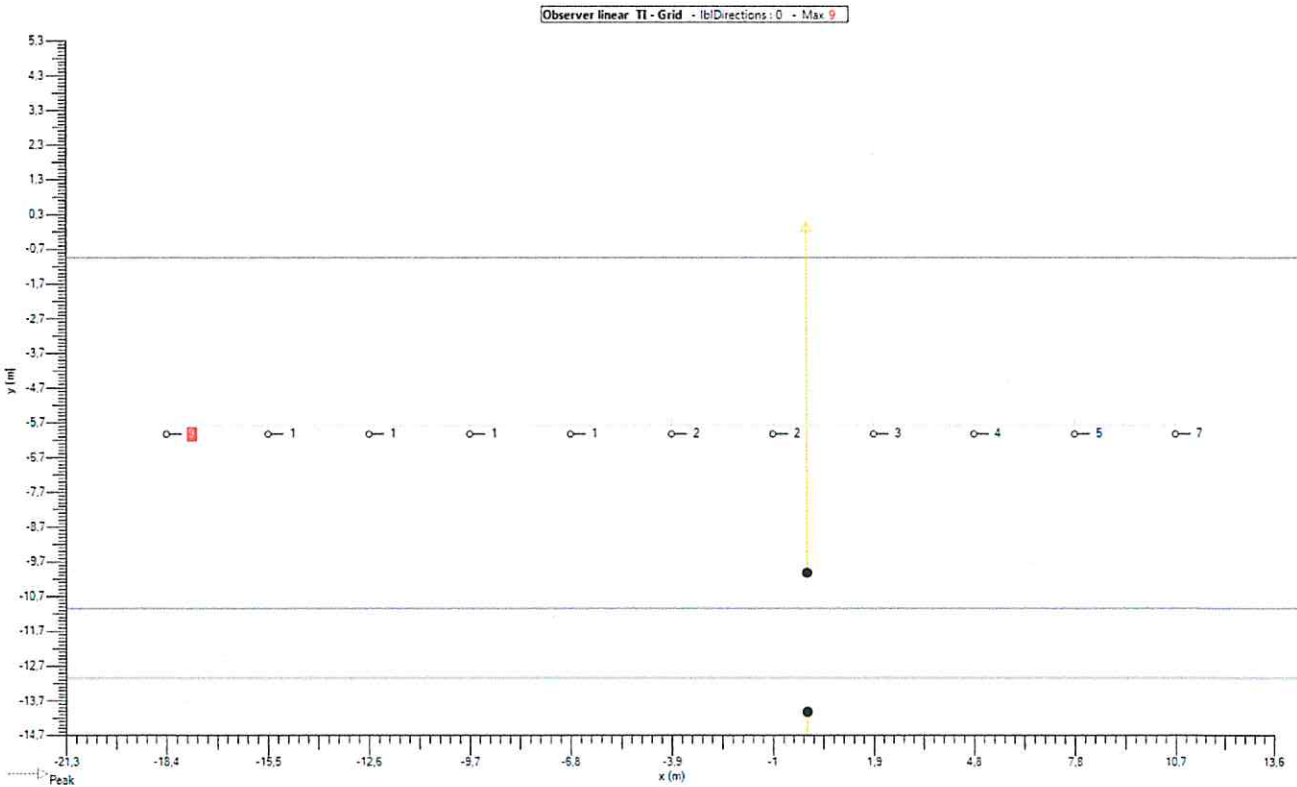


### 6.8. Multi-lanes (TI 1) - TI - Grid

Implantation

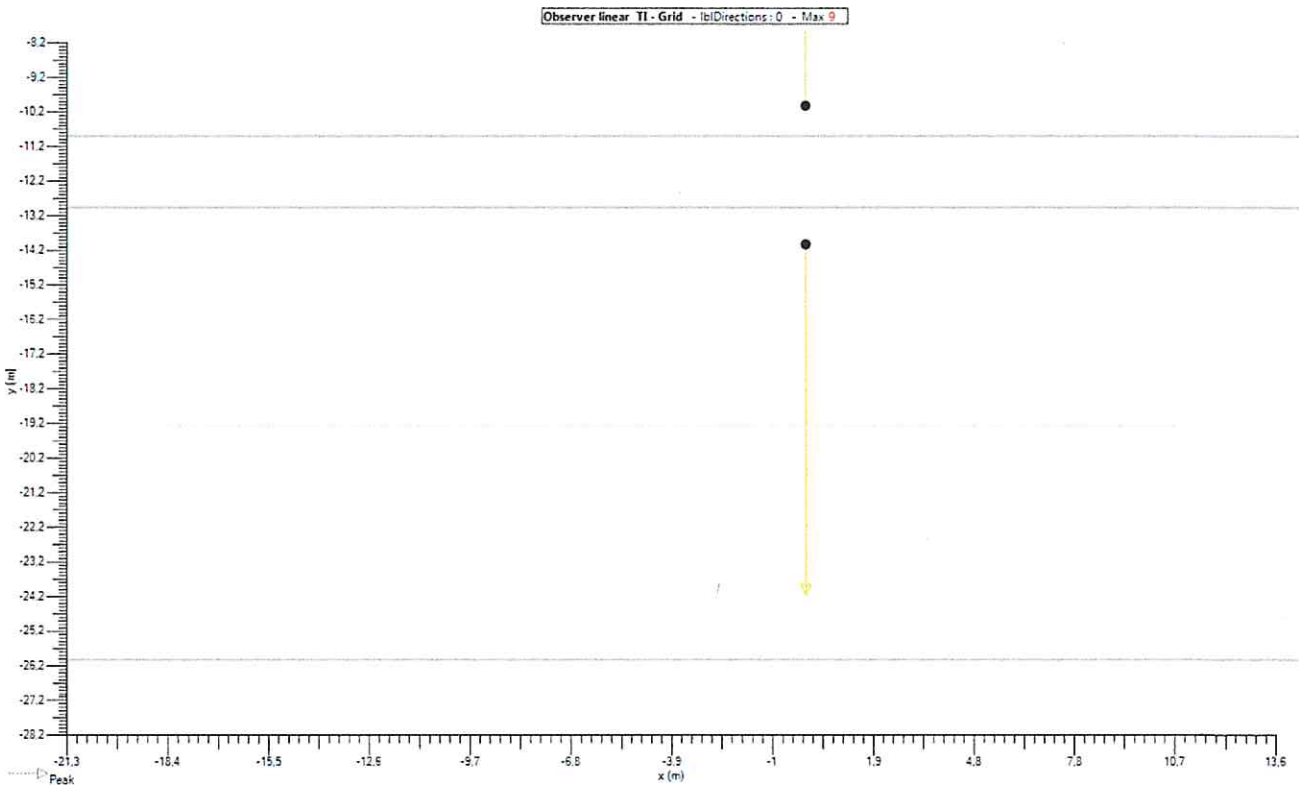


Values

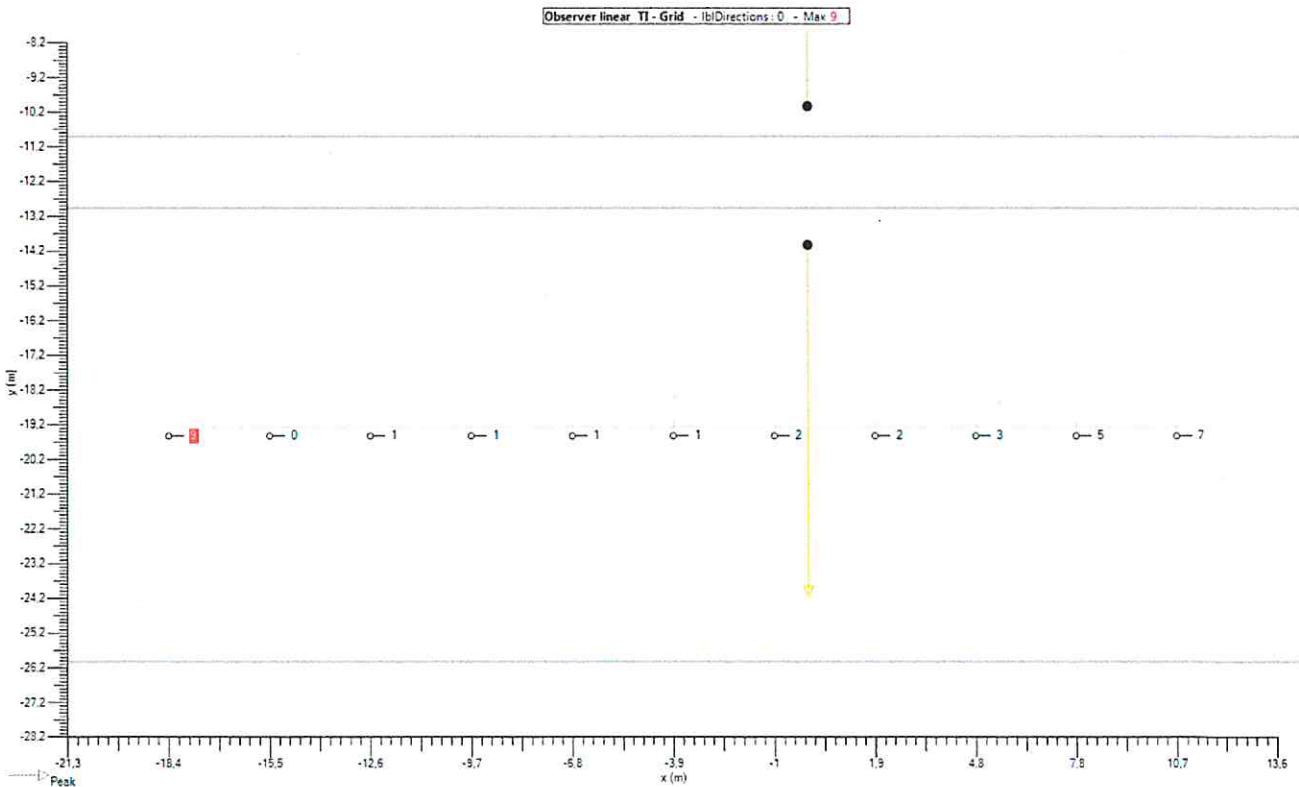


6.9. Multi-lanes (TI 1) (1) - TI - Grid

Implantation



Values






7. Grids

7.1. Multi-lanes (LU)

General


Type Grid rectangular XY  
Enabled ☒  
Colour 

Geometry

Origin X 1,45 m Y -8,33 m Z 0,00 m  
Rotation X 0,0 ° Y 0,0 ° Z 0,0 °  
Dimension Count X 11 Count Y 3  
Spacing X 2,91 m Spacing Y 3,33 m  
Size X 29,09 m Size Y 6,67 m

7.2. Multi-lanes (LU) (1)

General

Type Grid rectangular XY  
Enabled ☒  
Colour 

Geometry

Origin X 1,45 m Y -22,83 m Z 0,00 m  
Rotation X 0,0 ° Y 0,0 ° Z 0,0 °  
Dimension Count X 11 Count Y 3  
Spacing X 2,91 m Spacing Y 4,33 m  
Size X 29,09 m Size Y 8,67 m

## 8. Observer

### 8.1. Multi-lanes (TI 1)

#### General

Type Observer linear

En ☒Color 

Directions 0,0

Calculation TI - Grid

Grid Multi-lanes (LU)

#### Geometry

Origin X -18,43 m Y -5,00 m Z 1,50 m

Rotation X 0,0 ° Y 0,0 ° Z 0,0 °

Dimension Count 11 Spacing 2,91 m Size 29,09 m

### 8.2. Multi-lanes (TI 1) (1)

#### General

Type Observer linear

En ☒Color 

Directions 0,0

Calculation TI - Grid

Grid Multi-lanes (LU) (1)

#### Geometry

Origin X -18,43 m Y -18,50 m Z 1,50 m

Rotation X 0,0 ° Y 0,0 ° Z 0,0 °

Dimension Count 11 Spacing 2,91 m Size 29,09 m