

Comune di Quarrata - Via Vecchia Fiorentina 2° tr. 2° Tratto

Standard EN 13201 : 2015

Designer Studio Tecnico

Date 19/03/2022

Application Ulysse 3.5.2

Description Verifica Illuminotecnica Via Vecchia Fiorentina 2° tr. 2° Tratto

Categoria M3 : Strada urbana di quartiere

Teceo 1 48led 1000mA 153W ottica 5141

Table of contents

1.	Fixtures	3
1.1.	TECEO GEN2 1 48 LEDs 1000mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532.....	3
2.	Photometric documents.....	4
2.1.	TECEO GEN2 1 48 LEDs 1000mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532.....	4
3.	Results	5
3.1.	Grid summary	5
3.2.	Observer summary	5
3.3.	Values summary	5
4.	Power consumption	5
4.1.	Dynamic cross section	5
5.	Cross section.....	6
5.1.	2D View.....	6
6.	Dynamic cross section	7
6.1.	Matrix description	7
6.2.	Luminaire positions	7
6.3.	Luminaire groups	7
6.4.	Luminance - Multi-lanes (LU) - C2007.....	8
6.5.	Luminance - Multi-lanes (LU) - C2007.....	10
6.6.	Multi-lanes (TI 1) - TI - Grid.....	12
6.7.	Multi-lanes (TI 2) - TI - Grid.....	13
7.	Grids	14
7.1.	Multi-lanes (LU)	14
8.	Observer	15
8.1.	Multi-lanes (TI 1).....	15
8.2.	Multi-lanes (TI 2).....	15

1. Fixtures

1.1. TECEO GEN2 1 48 LEDs 1000mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532

Type TECEO GEN2 1

Reflector 5141

Source 48 LEDs 1000mA WW730

Protector Piano, Vetro extra chiaro, Liscio

Source flux 19,923 klm

G* 3

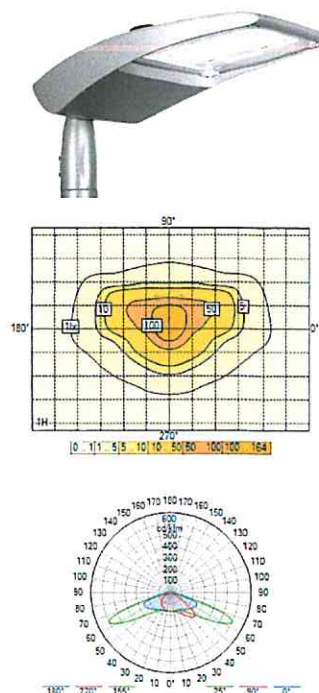
Luminaire wattage 153,0 W

MF 0,80

Matrix 468532

Luminaire flux 16,366 klm

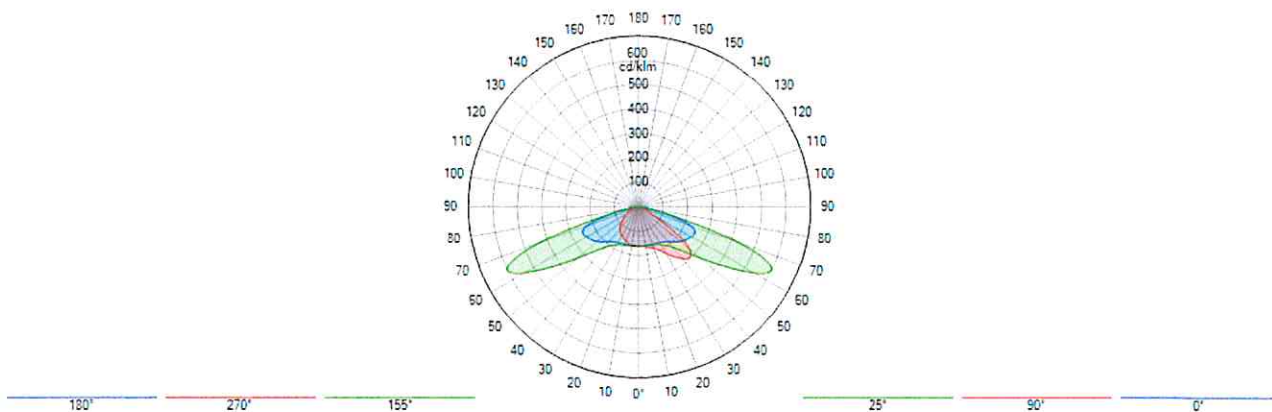
Efficacy 107 lm/W



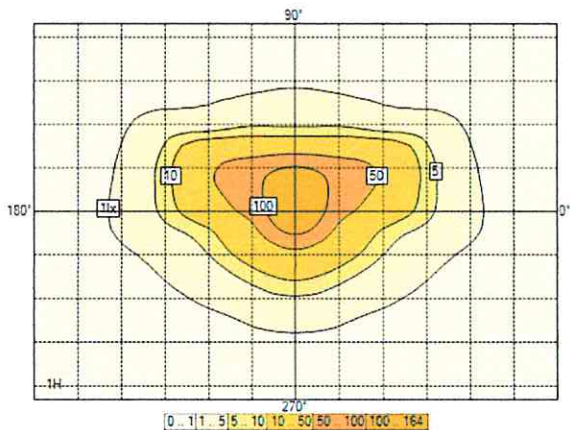
2. Photometric documents

2.1. TECEO GEN2 1 48 LEDs 1000mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532

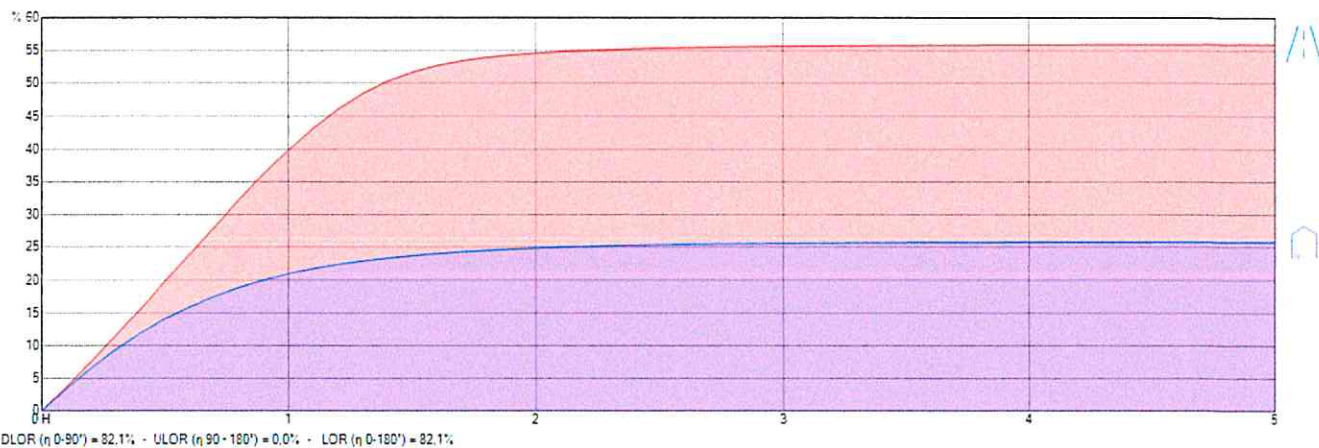
Polar/Cartesian diagram



Isolux



Utilization curve



3. Results

3.1. Grid summary

Multi-lanes (LU)

M3 (LU : Ave = 1,00 cd/m² Uo = 40 % UI = 60 % UoW = 15 % TI : 15 % EIR : 0,30)

1.1 Luminance - RTable - C2007

	Ave (A) (cd/m ²)	Min/Ave (%)	Min/Max (%)	Min (cd/m ²)	Max (cd/m ²)	UL (%)	
Dynamic cross section - Observer 1 (-60,00; -15,00; 1,50)	0,84	17	7	0,14	1,99	68 %	✗
Dynamic cross section - Observer 2 (-60,00; -5,00; 1,50)	0,92	15	6	0,14	2,20	65 %	✗

1.2 Luminance - RTable - C2007

	Ave (A) (cd/m ²)	Min/Ave (%)	Min/Max (%)	Min (cd/m ²)	Max (cd/m ²)	UL (%)	
Dynamic cross section - Observer 1 (-60,00; -15,00; 1,50)	0,84	17	7	0,14	1,99	68 %	✓
Dynamic cross section - Observer 2 (-60,00; -5,00; 1,50)	0,92	15	6	0,14	2,20	65 %	✓

3.2. Observer summary

Multi-lanes (TI 1)

M3 (LU : Ave = 1,00 cd/m² Uo = 40 % UI = 60 % UoW = 15 % TI : 15 % EIR : 0,30)

	TI	
Dynamic cross section - Direction (0,0)	14	✓

Multi-lanes (TI 2)

M3 (LU : Ave = 1,00 cd/m² Uo = 40 % UI = 60 % UoW = 15 % TI : 15 % EIR : 0,30)

	TI	
Dynamic cross section - Direction (0,0)	3	✓

3.3. Values summary

EIR road

M3 (LU : Ave = 1,00 cd/m² Uo = 40 % UI = 60 % UoW = 15 % TI : 15 % EIR : 0,30)

	EIR road	
Dynamic cross section - Multi-lanes (EIR)	0,09	✗

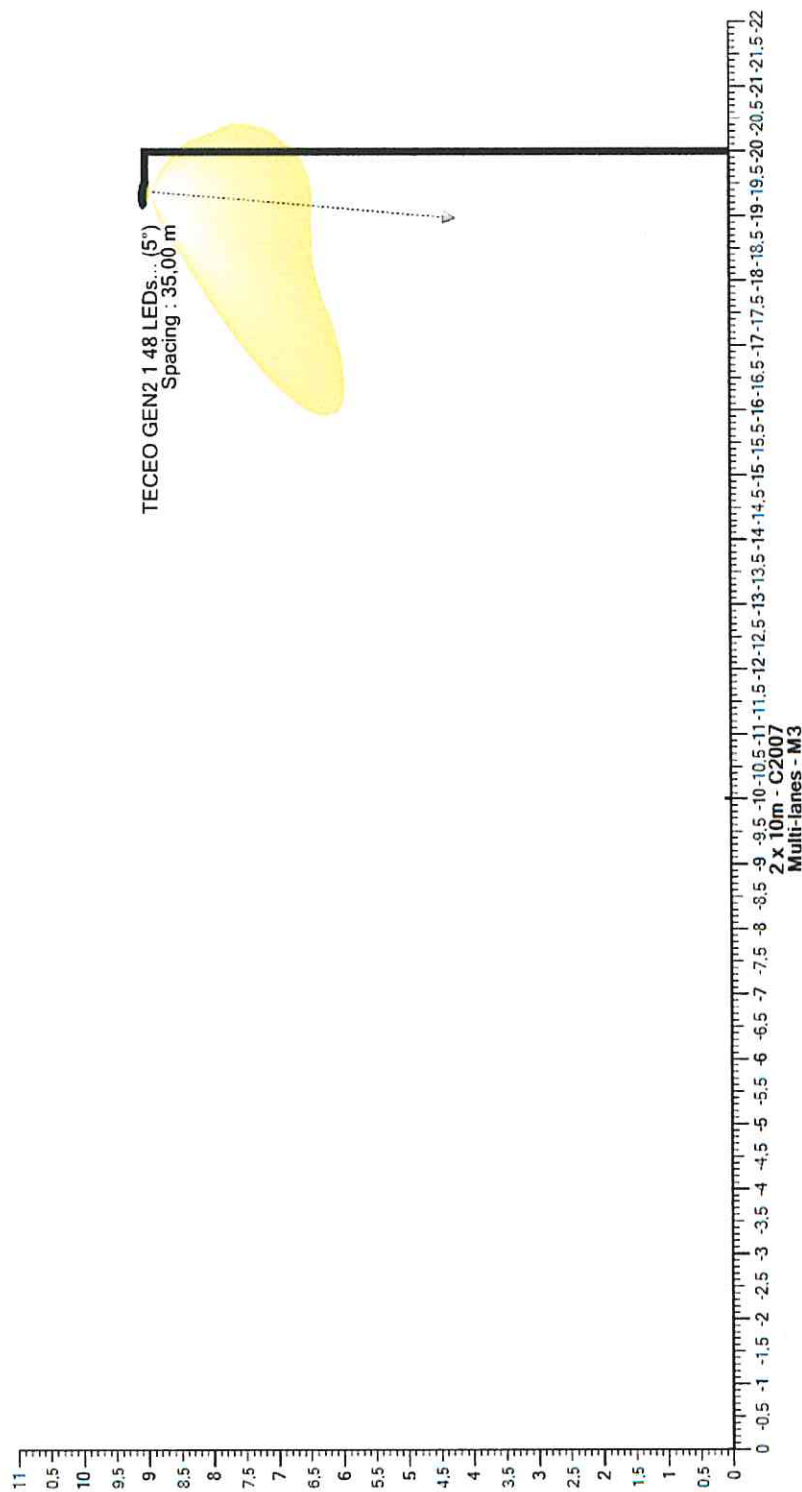
4. Power consumption

4.1. Dynamic cross section

Fixture	Current [mA]	Qty	Dimming	Power / Fixture	Total
TECEO GEN2 1 48 LEDs 1000mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	1000	29	100 %	153 W	4382 W



5. Cross section

5.1. 2D View









6. Dynamic cross section


6.1. Matrix description

Ph. color	Description	Current [mA]	Source flux [klm]	Luminaire flux [klm]	Power [W]	Efficacy [lm/W]	MF	Height [m]	Fixture
	TECEO GEN2 1 48 LEDs 1000mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	1000	19,923	16,366	153,4	107	0,800	6 x 9,00	

6.2. Luminaire positions

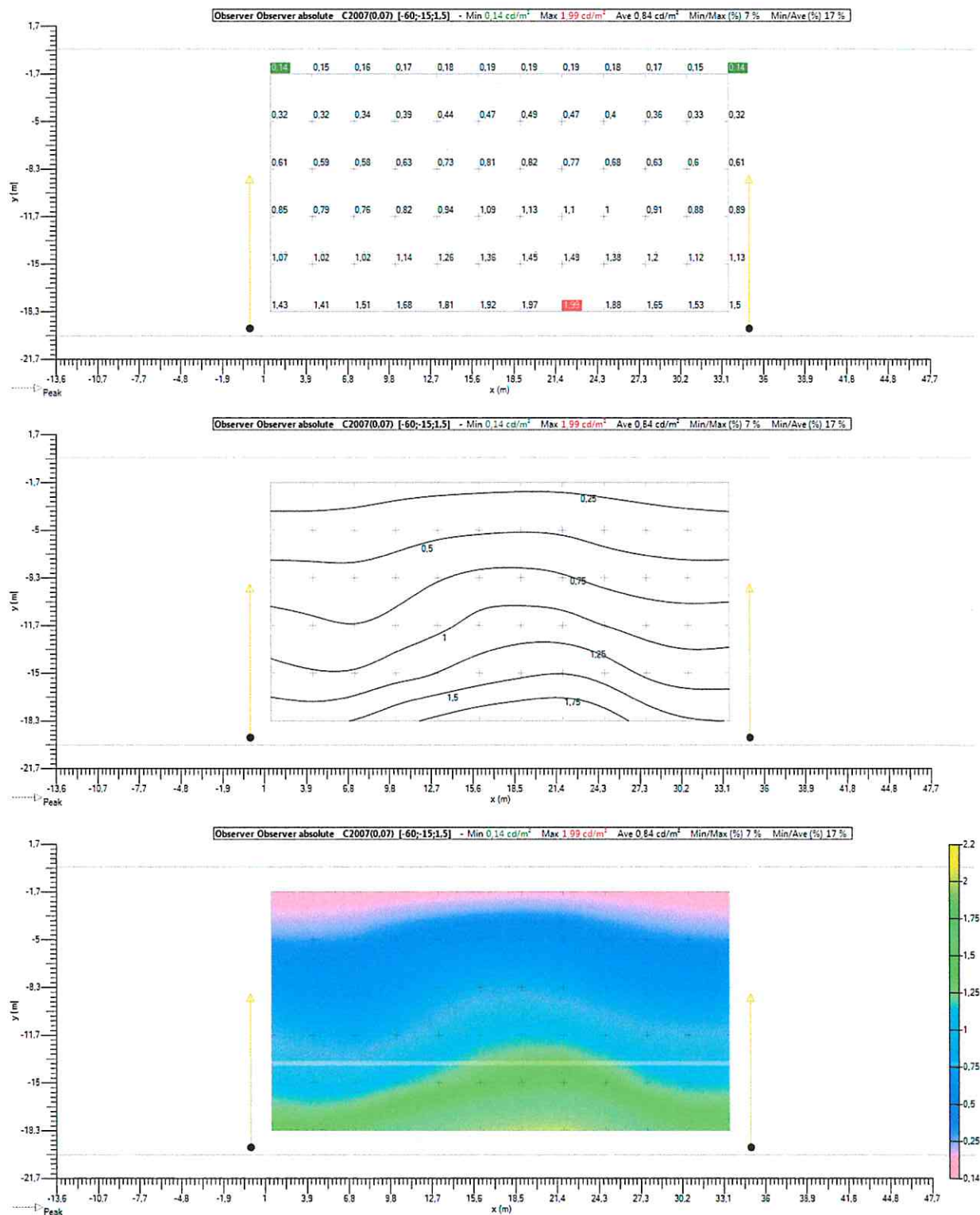
	Color	N°	Position			Luminaire							Target		
			X [m]	Y [m]	Z [m]	Name	Current [mA]	Az [°]	Incl [°]	Rot [°]	Flux [klm]	MF	X [m]	Y [m]	Z [m]
<input checked="" type="checkbox"/>		1	-35,00	-19,50	9,00	TECEO GEN2 1 48 LEDs 1000mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	0,0	5,0	0,0	19,923	0,800	-35,00	-18,71	0,00
<input checked="" type="checkbox"/>		2	0,00	-19,50	9,00	TECEO GEN2 1 48 LEDs 1000mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	0,0	5,0	0,0	19,923	0,800	0,00	-18,71	0,00
<input checked="" type="checkbox"/>		3	35,00	-19,50	9,00	TECEO GEN2 1 48 LEDs 1000mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	0,0	5,0	0,0	19,923	0,800	35,00	-18,71	0,00
<input checked="" type="checkbox"/>		4	70,00	-19,50	9,00	TECEO GEN2 1 48 LEDs 1000mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	0,0	5,0	0,0	19,923	0,800	70,00	-18,71	0,00
<input checked="" type="checkbox"/>		5	105,00	-19,50	9,00	TECEO GEN2 1 48 LEDs 1000mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	0,0	5,0	0,0	19,923	0,800	105,00	-18,71	0,00
<input checked="" type="checkbox"/>		6	140,00	-19,50	9,00	TECEO GEN2 1 48 LEDs 1000mA WW730 Piano, Vetro extra chiaro, Liscio 5141 468532	-	0,0	5,0	0,0	19,923	0,800	140,00	-18,71	0,00

6.3. Luminaire groups

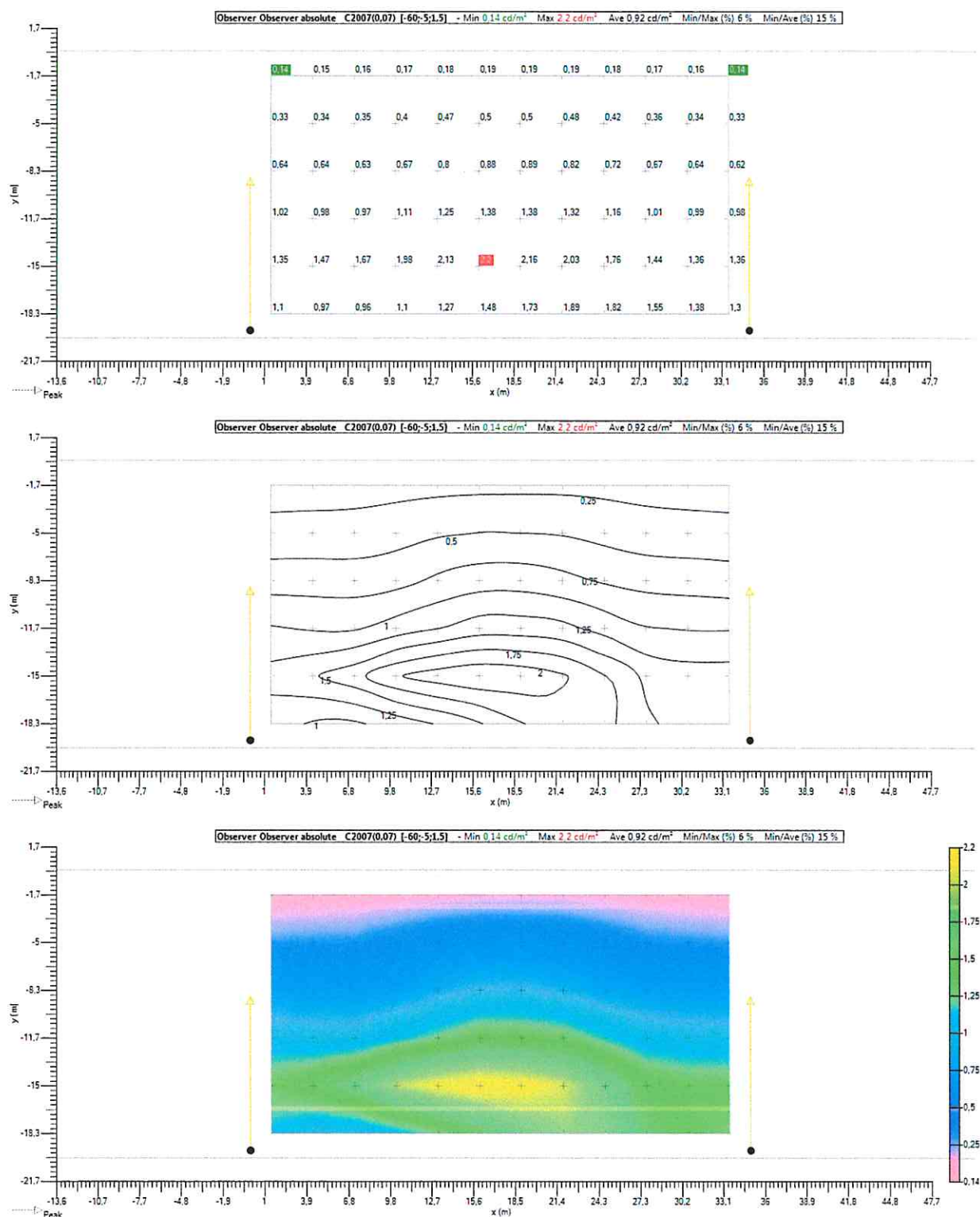
Linear																
	Color	N°	Position			Luminaire					Dimension			Rotation		
			X [m]	Y [m]	Z [m]	Name	Az [°]	Incl [°]	Rot [°]	Dim [%]	Count	Spacing [m]	Size [m]	X [°]	Y [°]	Z [°]
<input checked="" type="checkbox"/>		1	-35,00	-19,50	9,00	Fixture right	0,0	5,0	0,0	100	6	35,00	175,00	0,0	0,0	0,0

6.4. Luminance - Multi-lanes (LU) - C2007

Multi-lanes (LU) - Absolute 1

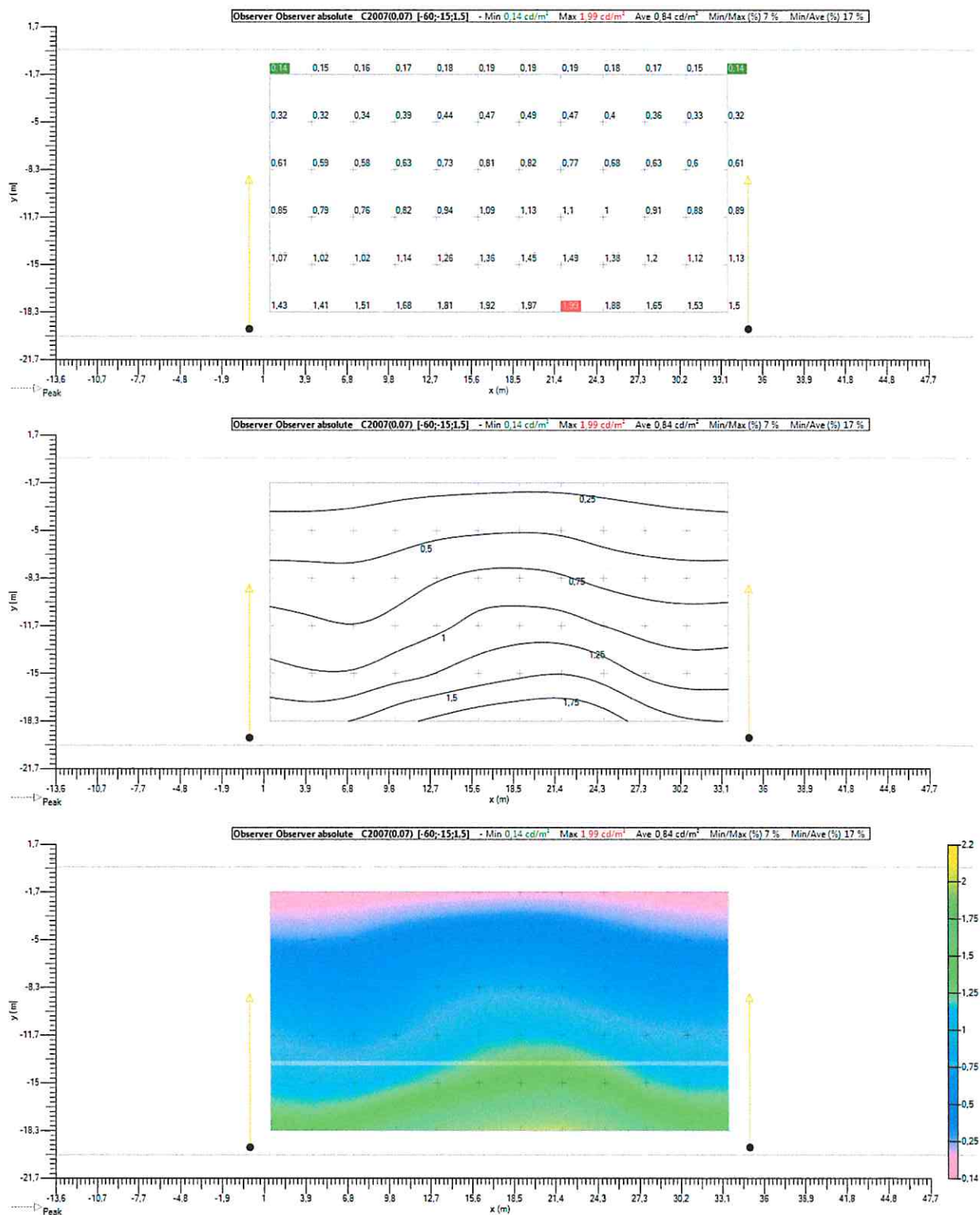


Multi-lanes (LU) - Absolute 2

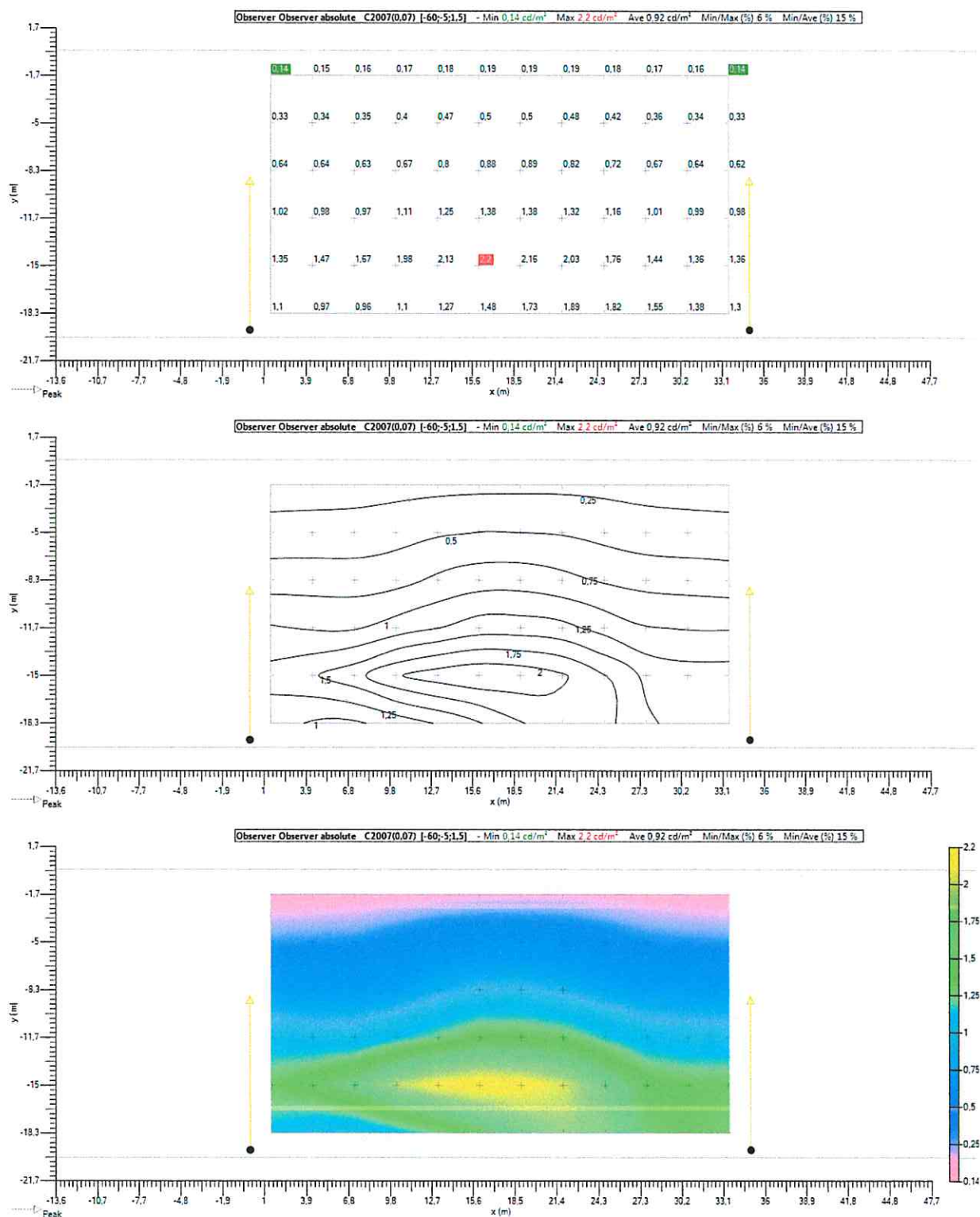


6.5. Luminance - Multi-lanes (LU) - C2007

Multi-lanes (LU) - Optional - Absolute 1

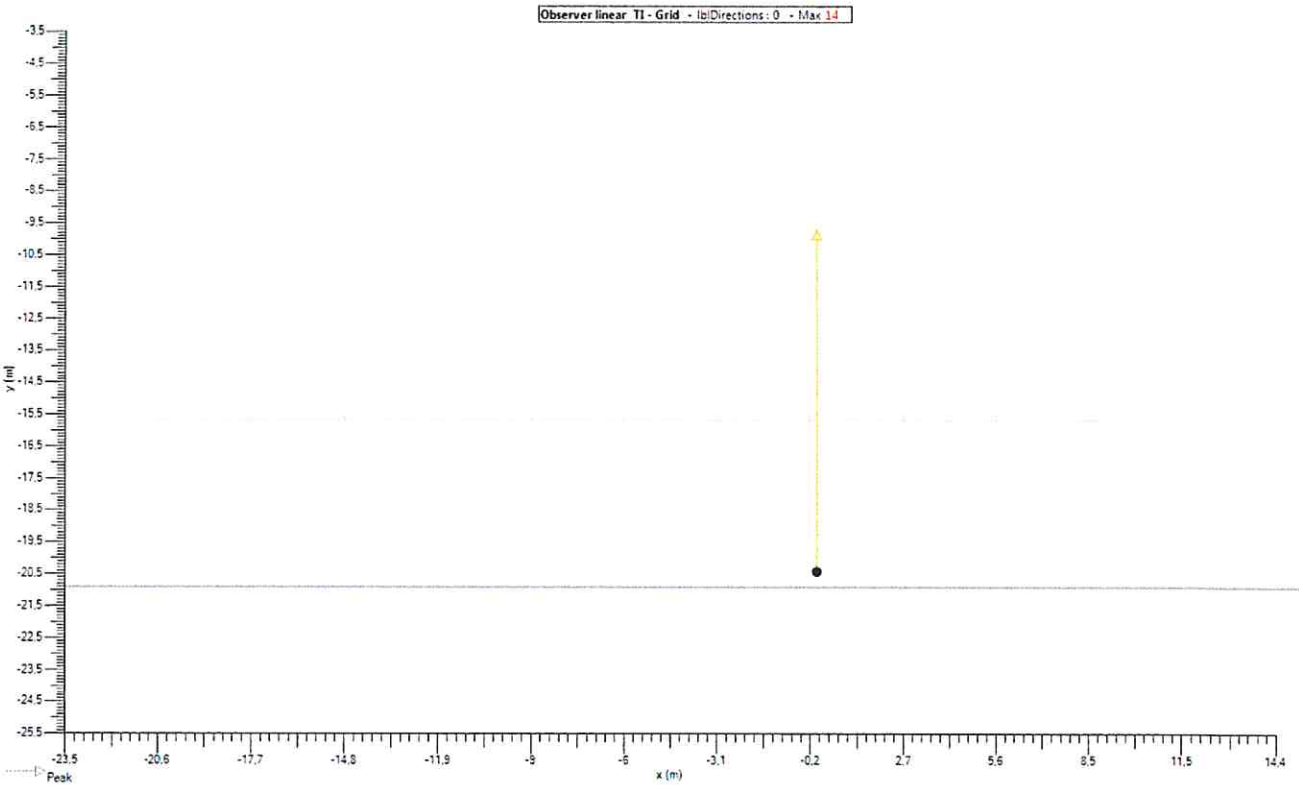


Multi-lanes (LU) - Optional - Absolute 2

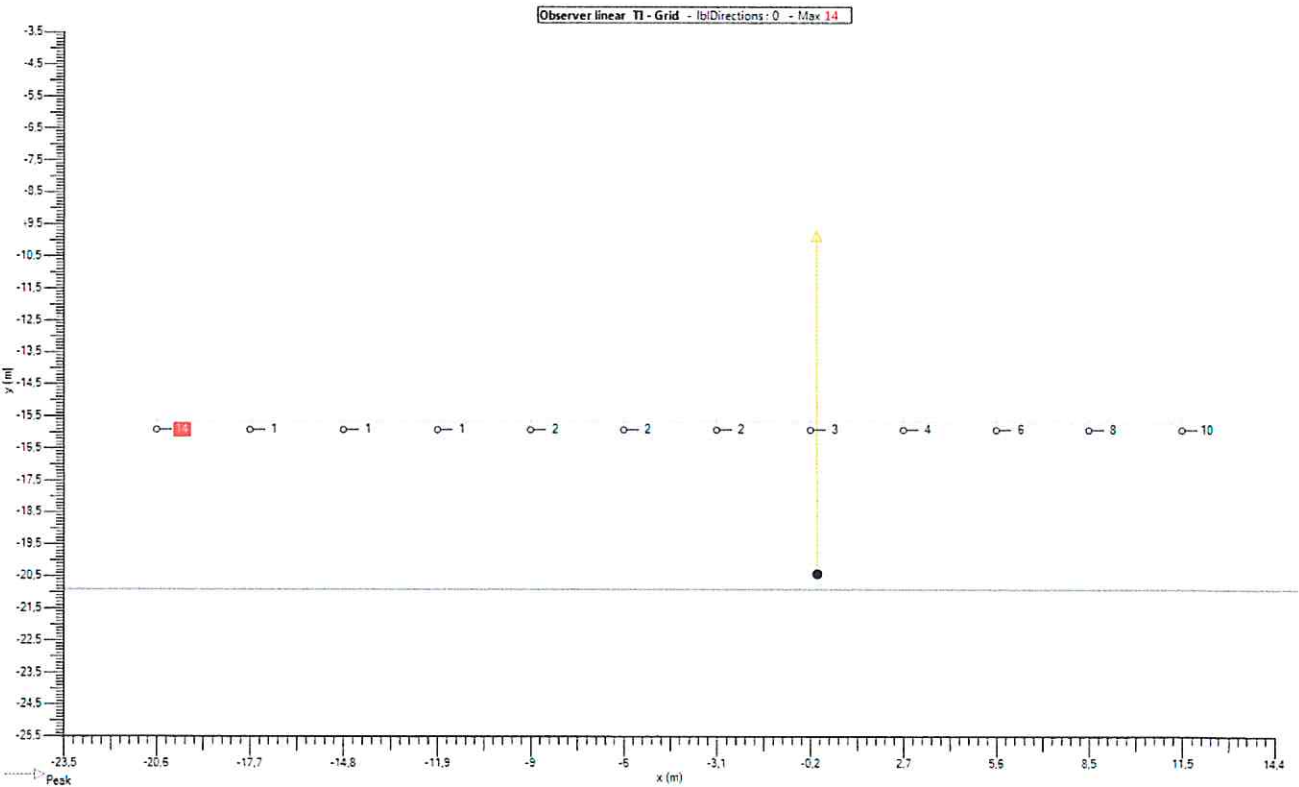


6.6. Multi-lanes (TI 1) - TI - Grid

Implantation

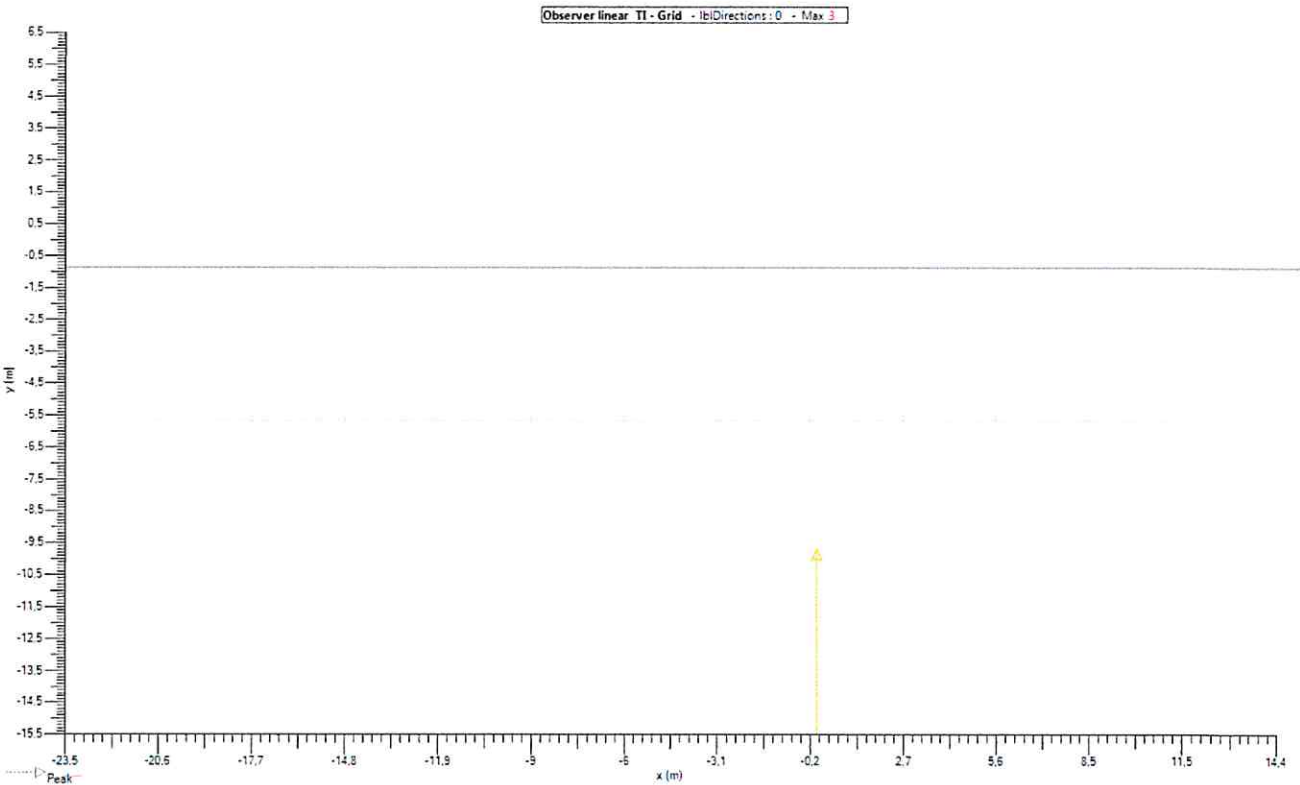


Values

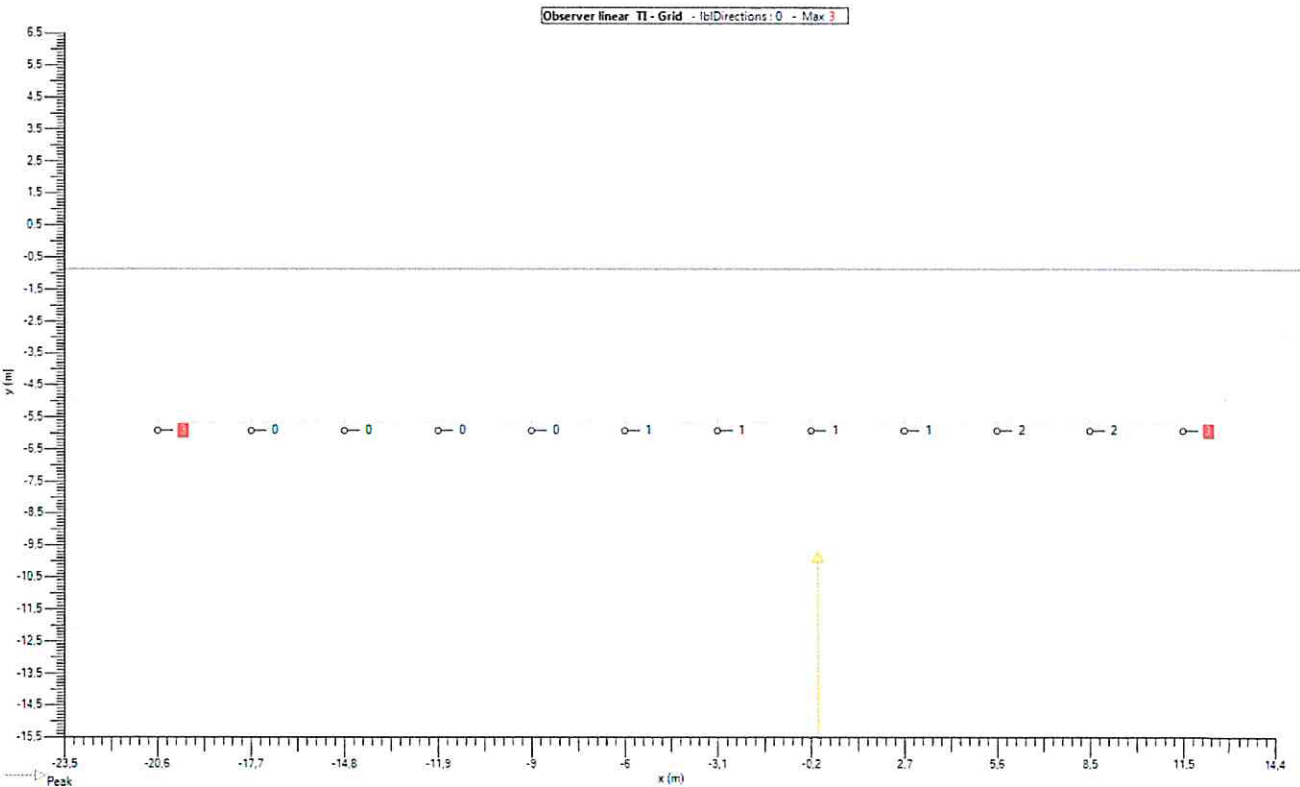


6.7. Multi-lanes (TI 2) - TI - Grid

Implantation



Values




7. Grids

7.1. Multi-lanes (LU)

General

Type Grid rectangular XY

Enabled ☒

Colour 

Geometry

Origin	X 1,46 m	Y -18,33 m	Z 0,00 m
Rotation	X 0,0 °	Y 0,0 °	Z 0,0 °
Dimension	Count X 12	Count Y 6	
	Spacing X 2,92 m	Spacing Y 3,33 m	
	Size X 32,08 m	Size Y 16,67 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 -20,63 m Y -15,00 m Z 1,50 m

Rotation X 0,0° Y 0,0° Z 0,0°

Dimension Count 12 Spacing 2,92 m Size 32,08 m

8.2. Multi-lanes (TI 2)

General

Type Observer linear

En ☒

Color 

Directions 0,0

Calculation TI - Grid

Grid Multi-lanes (LU)

Geometry

Origin X -20,63 m Y -5,00 m Z 1,50 m

Rotation X 0,0° Y 0,0° Z 0,0°

Dimension Count 12 Spacing 2,92 m Size 32,08 m