Comune di Quarrata - Via Brunelleschi

Standard EN 13201 : 2015

Designer Studio Tecnico

Date 19/03/2022

Application Ulysse 3.5.2

Description Verifica Illuminotecnica Via Brunelleschi

Categoria M3 : Strada Urbana di Quartiere

Teceo 1 32led 700mA ottica 5248

Table of contents

1. Fixtures

1.1. TECEO GEN2 1 32 LEDs 700mA WW730 Piano, Vetro extra chiaro, Liscio 5248 468702

Type TECEO GEN2 1

Reflector 5248

Source 32 LEDs 700mA WW730

Protector Piano, Vetro extra chiaro, Liscio

Source flux 10,156 klm

G* 2

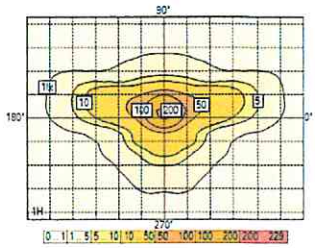
Luminaire wattage 70,0 W

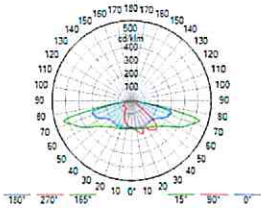
MF 0,80

Matrix 468702

Luminaire flux 8,013 klm

Efficacy 114 lm/W

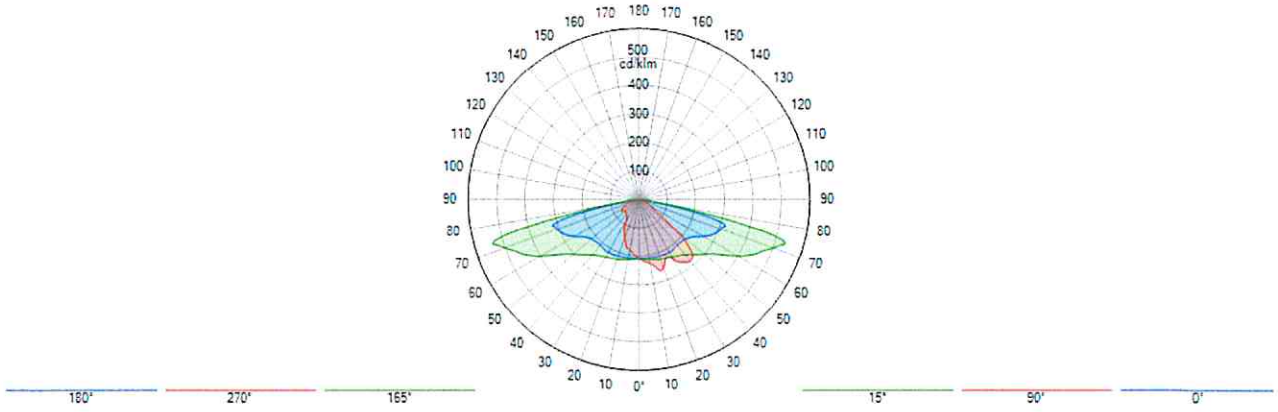




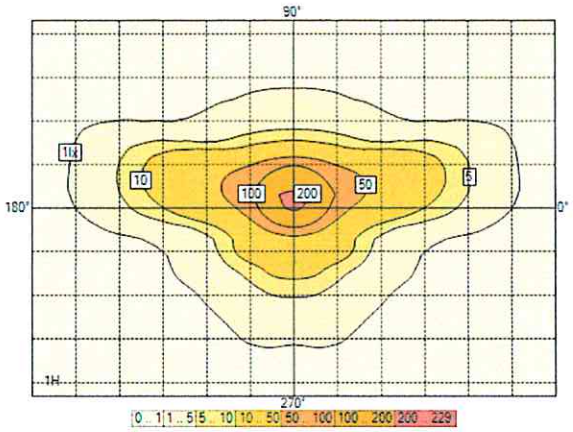
2. Photometric documents

2.1. TECEO GEN2 1 32 LEDs 700mA WW730 Piano, Vetro extra chiaro, Liscio 5248 468702

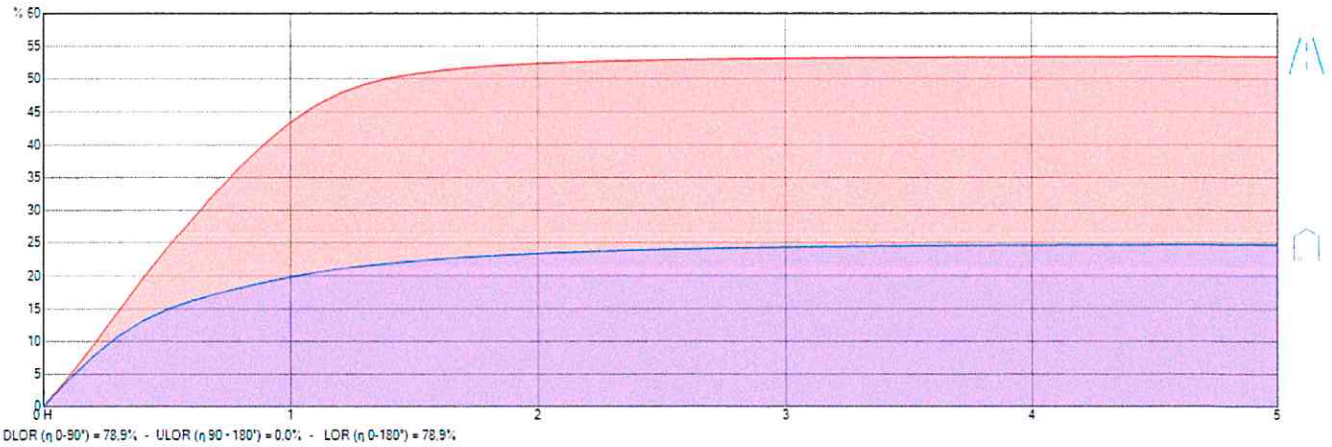
Polar/Cartesian diagram



Isolux



Utilization curve



DLOR (η 0-90°) = 78.9% - ULOR (η 90 - 180°) = 0.0% - LOR (η 0-180°) = 78.9%

3. Results

3.1. Grid summary

Multi-lanes (LU)

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

1.1 Luminance - RTable - C2007	Ave (A) (cd/m²)	Min/Ave (%)	Min/Max (%)	Min (cd/m²)	Max (cd/m²)	UL (%)	
Dynamic cross section - Observer 1 (-60,00; -6,00; 1,50)	1,05	54	36	0,57	1,60	89 %	✓
Dynamic cross section - Observer 2 (-60,00; -2,00; 1,50)	1,16	53	35	0,61	1,73	83 %	✓

1.2 Luminance - RTable - C2007	Ave (A) (cd/m²)	Min/Ave (%)	Min/Max (%)	Min (cd/m²)	Max (cd/m²)	UL (%)	
Dynamic cross section - Observer 1 (-60,00; -6,00; 1,50)	1,05	54	36	0,57	1,60	89 %	✓
Dynamic cross section - Observer 2 (-60,00; -2,00; 1,50)	1,16	53	35	0,61	1,73	83 %	✓

3.2. Observer summary

Multi-lanes (TI 1)

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

	TI	
Dynamic cross section - Direction (0,0)	10	✓

Multi-lanes (TI 2)

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

	TI	
Dynamic cross section - Direction (0,0)	8	✓

3.3. Values summary

EIR road

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

	EIR road	
Dynamic cross section - Multi-lanes (EIR)	0,52	✓

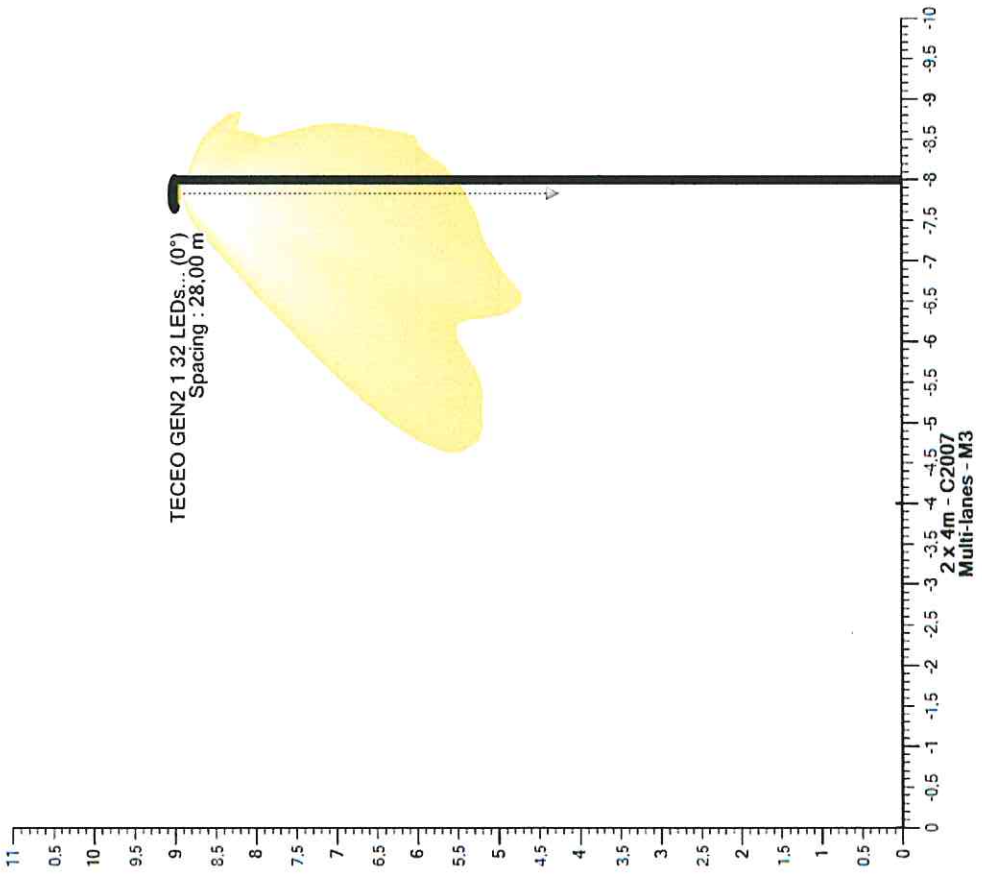
4. Power consumption

4.1. Dynamic cross section

Fixture	Current [mA]	Qty	Dimming	Power / Fixture	Total
TECEO GEN2 1 32 LEDs 700mA WW730 Piano, Vetro extra chiaro, Liscio 5248 468702	700	36	100 %	70 W	2503 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 32 LEDs 700mA WW730 Piano, Vetro extra chiaro, Liscio 5248 468702	700	10,156	8,013	70,1	114	0,800	6 x 9,00	

6.2. Luminaire positions

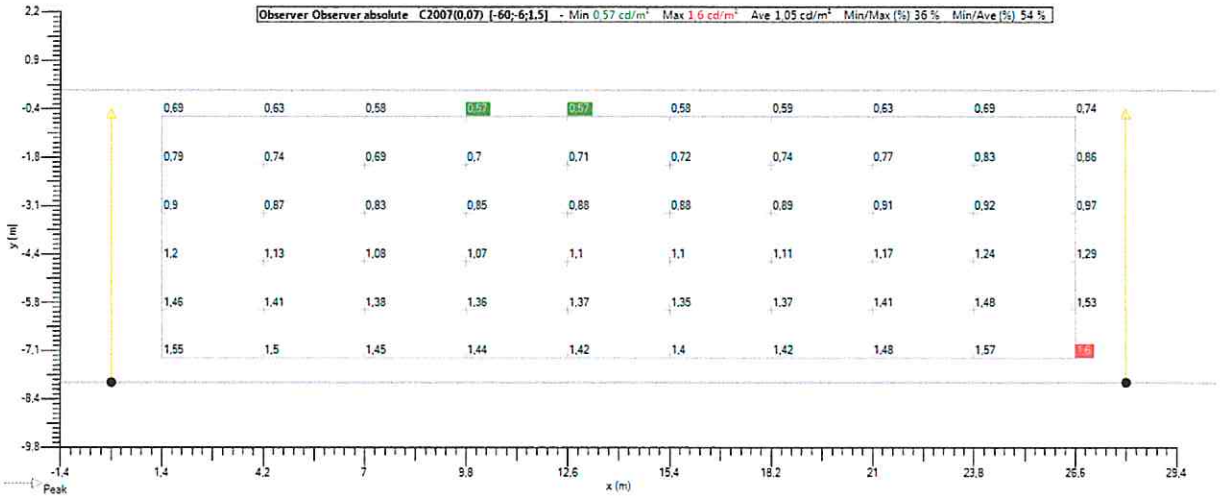
	Color	N°	Position			Luminaire							Target		
			X [m]	Y [m]	Z [m]	Name	Current [mA]	Az [°]	Incl [°]	Rot [°]	Flux [klm]	MF	X [m]	Y [m]	Z [m]
☑		1	-28,00	-8,00	9,00	TECEO GEN2 1 32 LEDs 700mA WW730 Piano, Vetro extra chiaro, Liscio 5248 468702	-	0,0	0,0	0,0	10,156	0,800	-28,00	-8,00	0,00
☑		2	0,00	-8,00	9,00	TECEO GEN2 1 32 LEDs 700mA WW730 Piano, Vetro extra chiaro, Liscio 5248 468702	-	0,0	0,0	0,0	10,156	0,800	0,00	-8,00	0,00
☑		3	28,00	-8,00	9,00	TECEO GEN2 1 32 LEDs 700mA WW730 Piano, Vetro extra chiaro, Liscio 5248 468702	-	0,0	0,0	0,0	10,156	0,800	28,00	-8,00	0,00
☑		4	56,00	-8,00	9,00	TECEO GEN2 1 32 LEDs 700mA WW730 Piano, Vetro extra chiaro, Liscio 5248 468702	-	0,0	0,0	0,0	10,156	0,800	56,00	-8,00	0,00
☑		5	84,00	-8,00	9,00	TECEO GEN2 1 32 LEDs 700mA WW730 Piano, Vetro extra chiaro, Liscio 5248 468702	-	0,0	0,0	0,0	10,156	0,800	84,00	-8,00	0,00
☑		6	112,00	-8,00	9,00	TECEO GEN2 1 32 LEDs 700mA WW730 Piano, Vetro extra chiaro, Liscio 5248 468702	-	0,0	0,0	0,0	10,156	0,800	112,00	-8,00	0,00

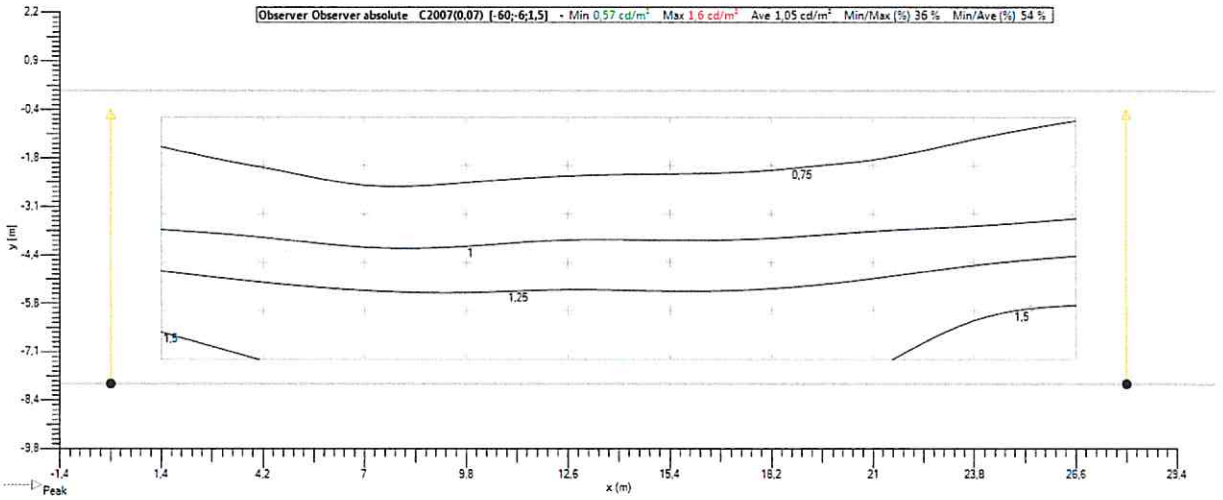
6.3. Luminaire groups

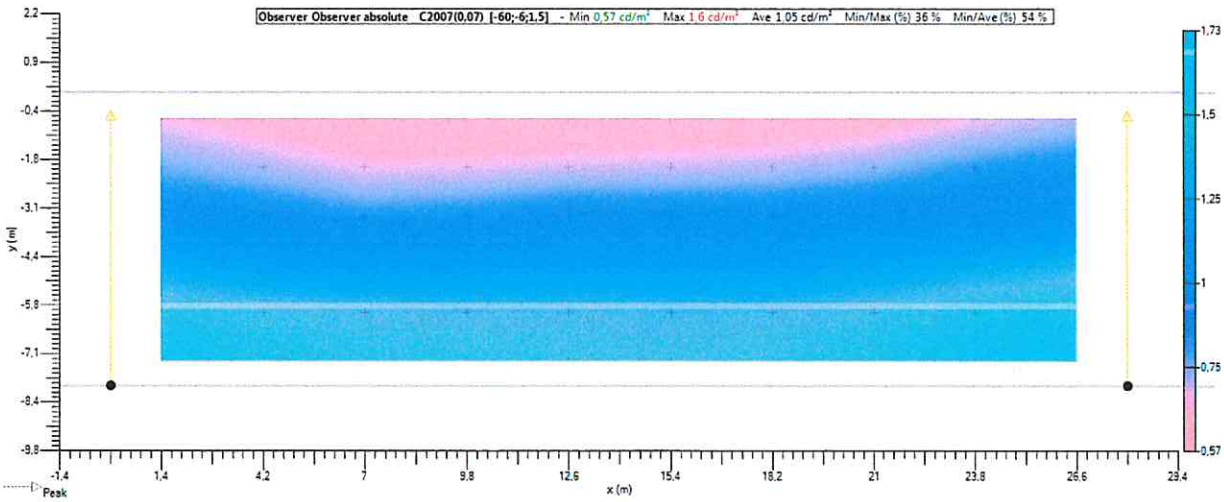
Linear																	
	Color	N°	Position			Luminaire					Dimension			Rotation			
			X [m]	Y [m]	Z [m]	Name	Az [°]	Incl [°]	Rot [°]	Dim [%]	Count	Spacing [m]	Size [m]	X [°]	Y [°]	Z [°]	
☑		1	-28,00	-8,00	9,00	Fixture right	0,0	0,0	0,0	100	6	28,00	140,00	0,0	0,0	0,0	

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

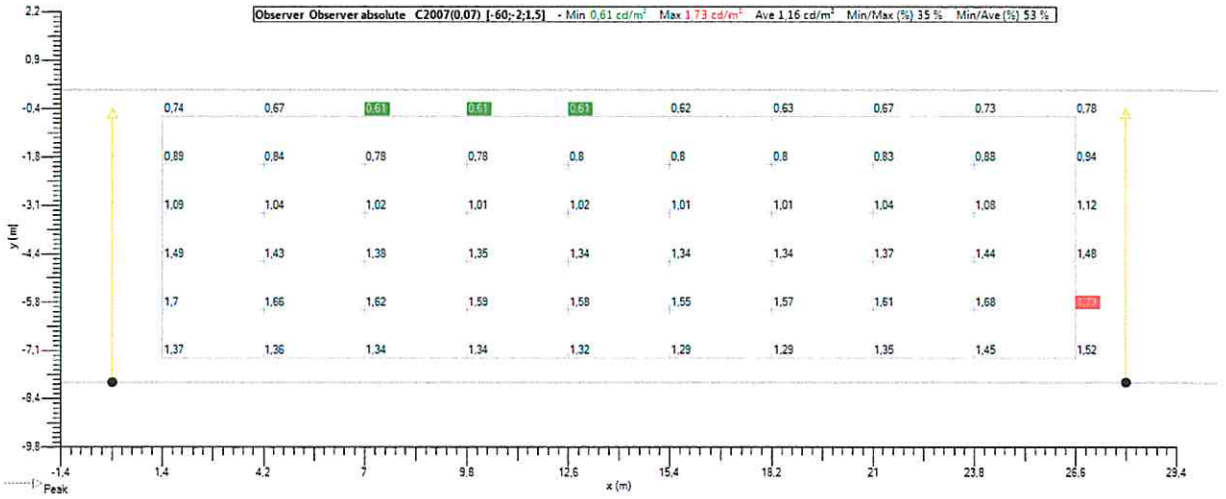
Multi-lanes (LU) - Absolute 1

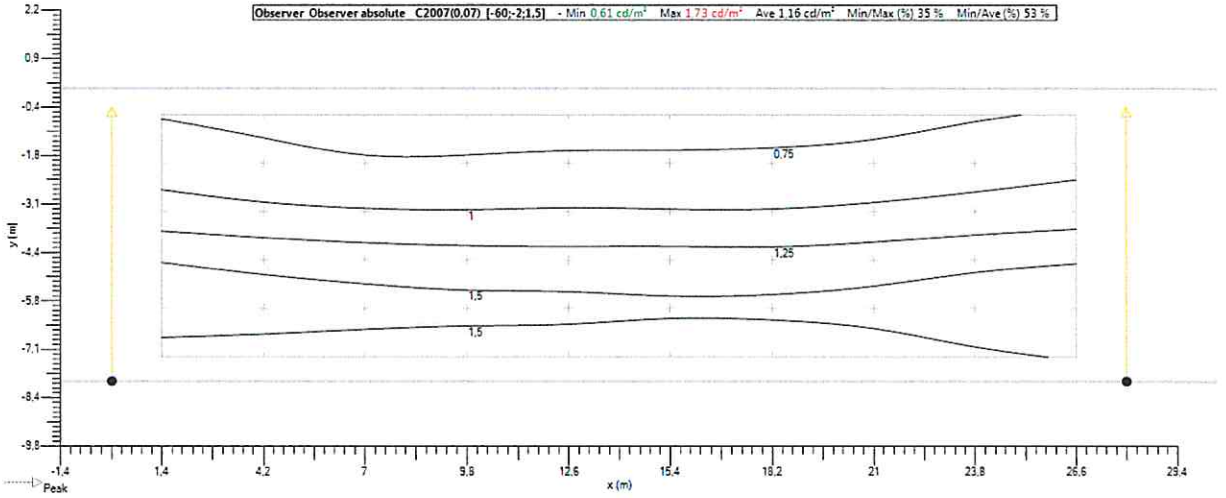


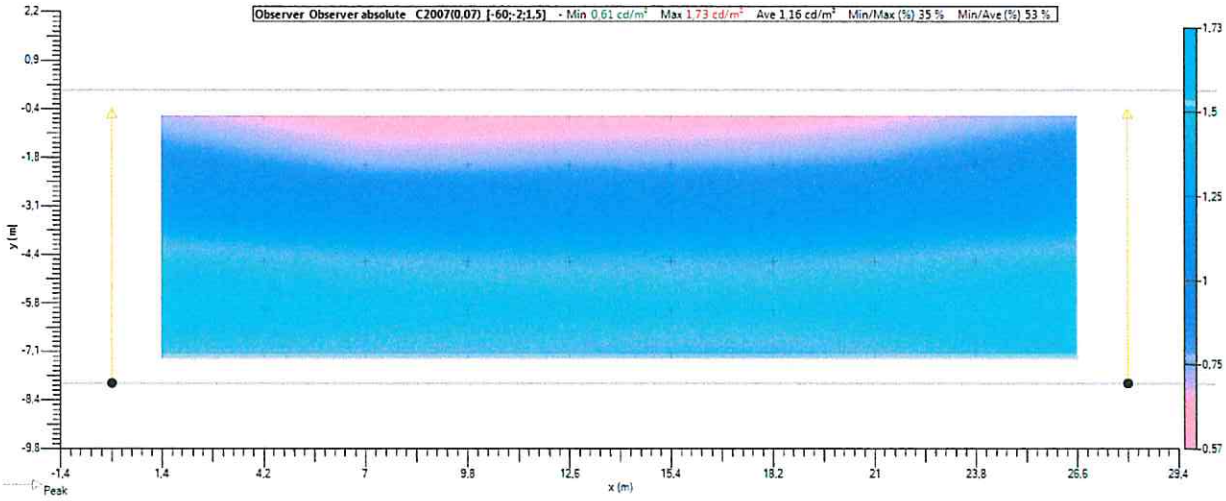




Multi-lanes (LU) - Absolute 2

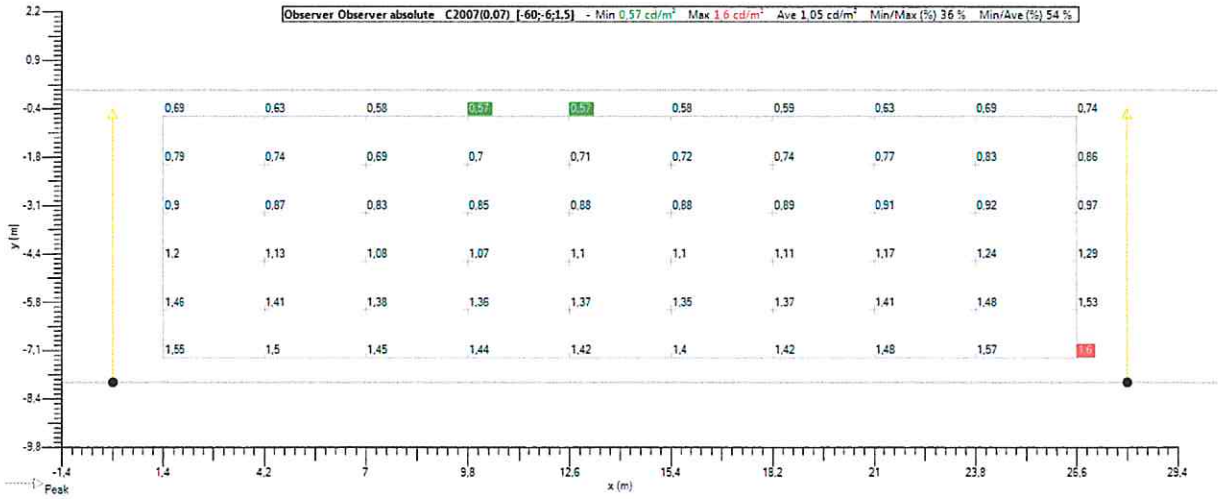


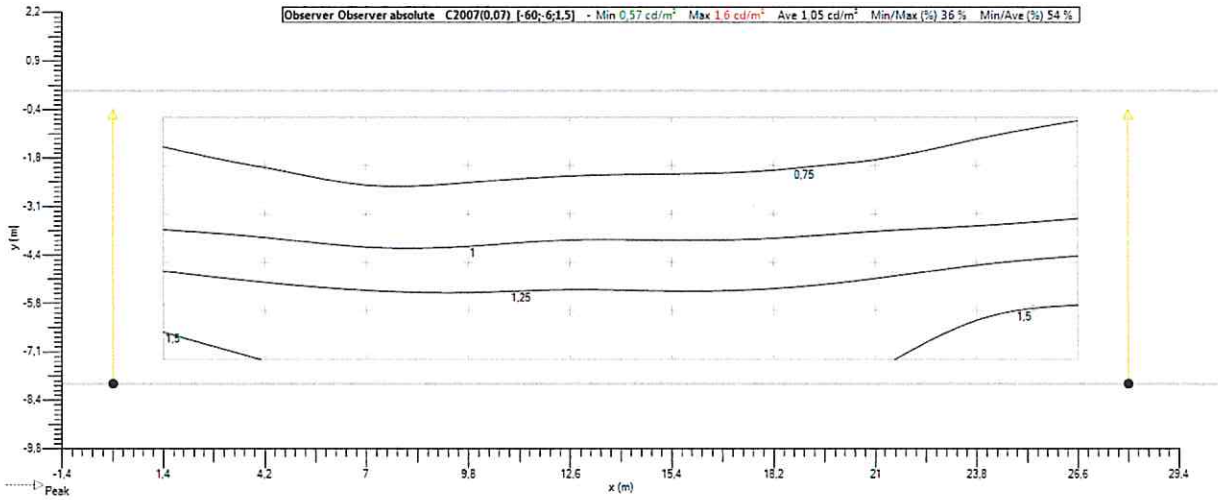


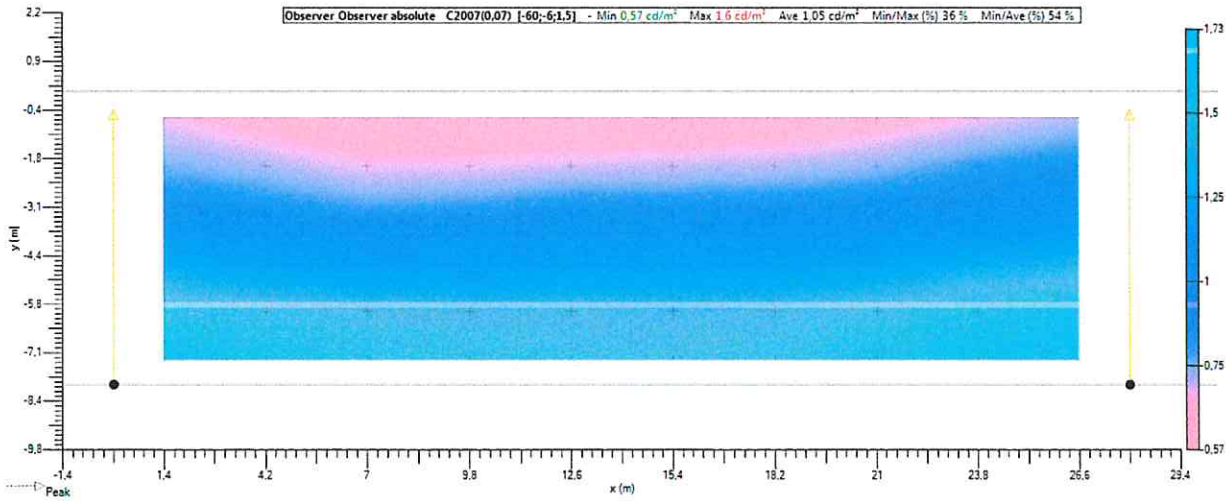


6.5. Luminance - Multi-lanes (LU) - C2007

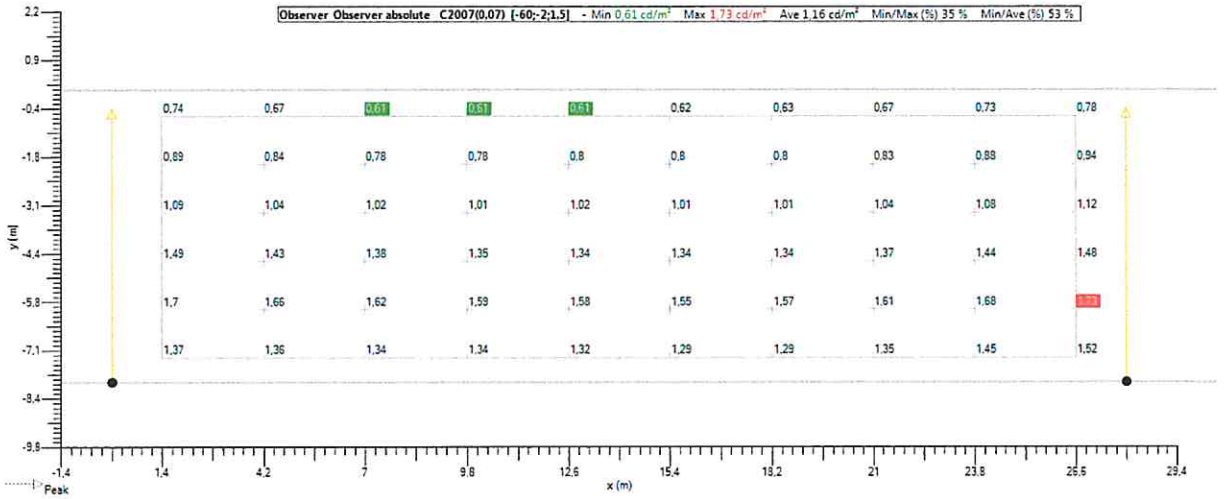
Multi-lanes (LU) - Optional - Absolute 1

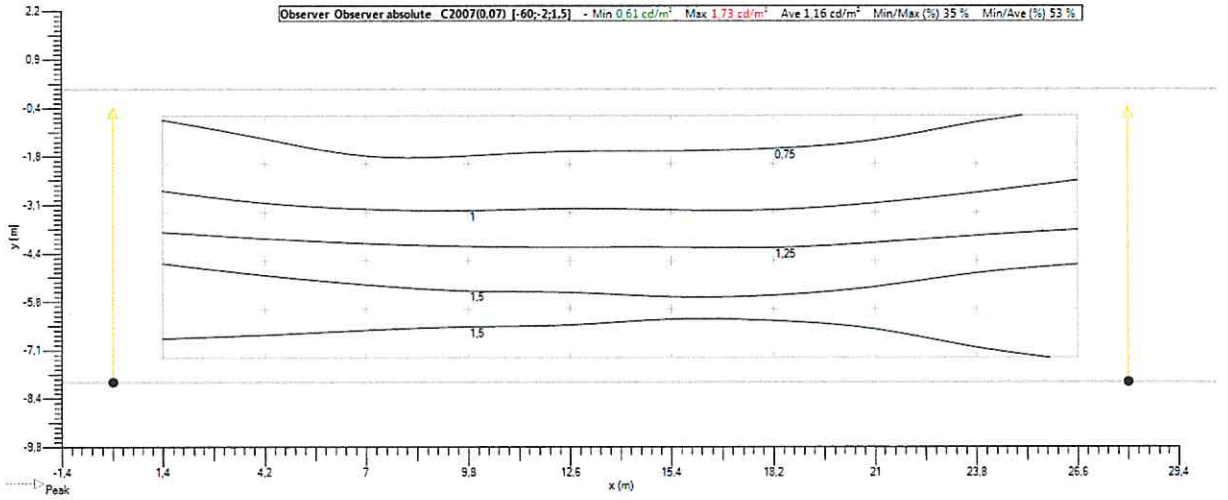


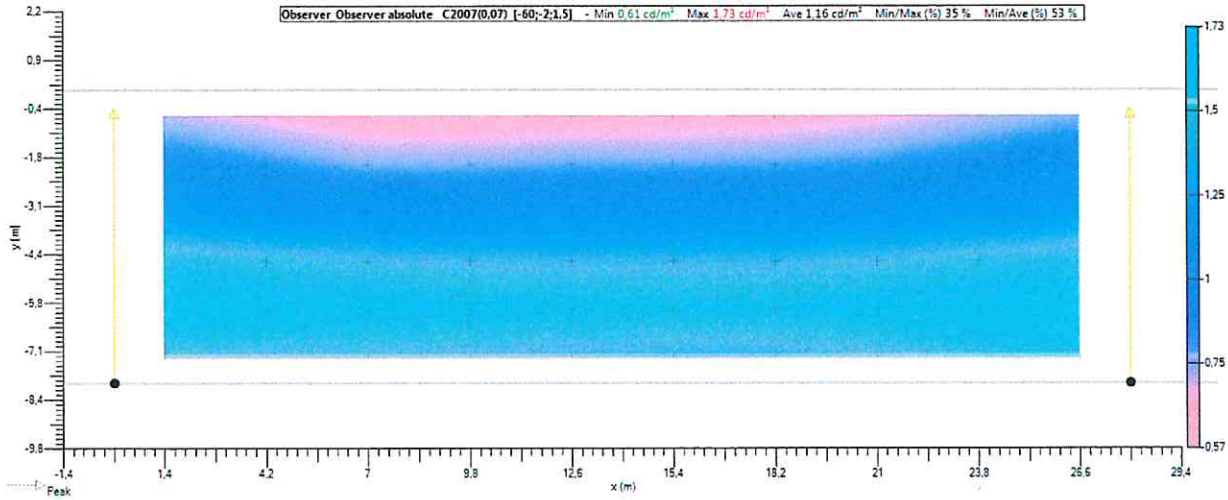




Multi-lanes (LU) - Optional - Absolute 2

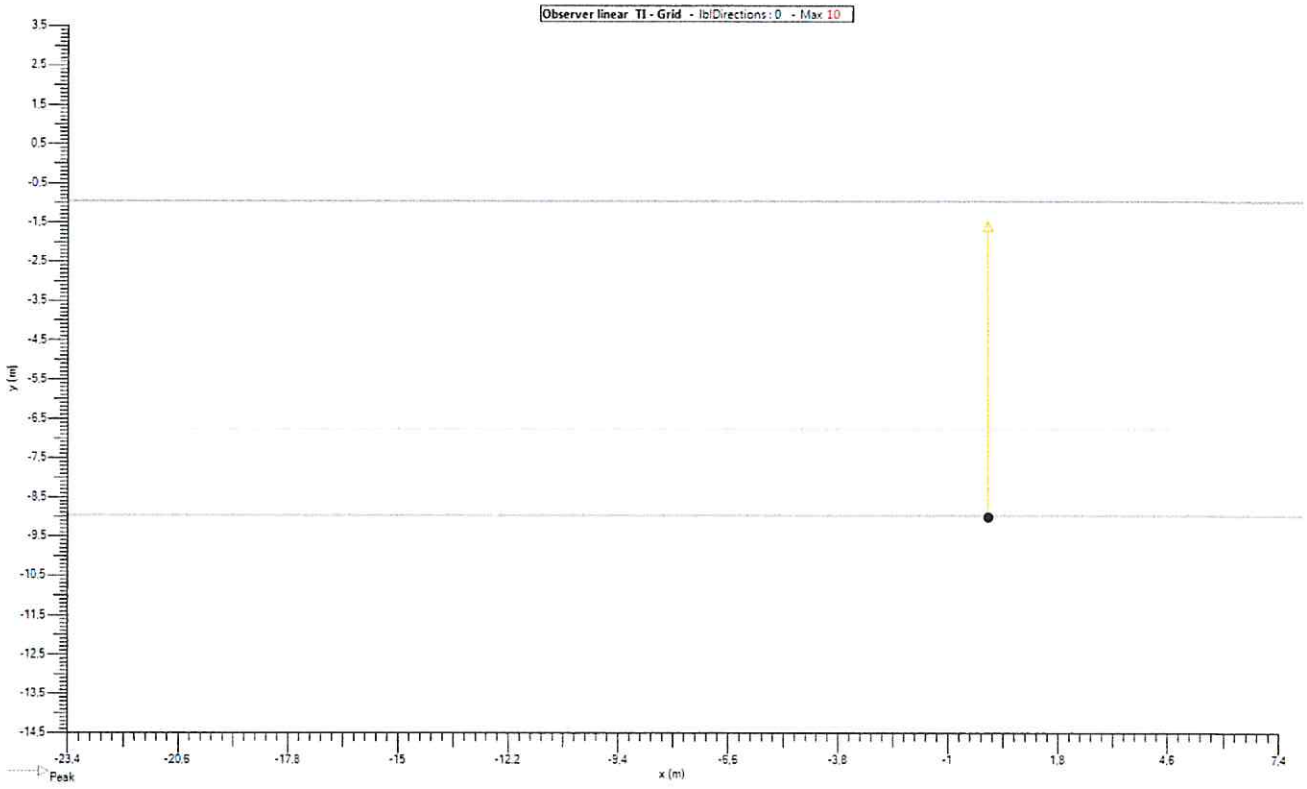




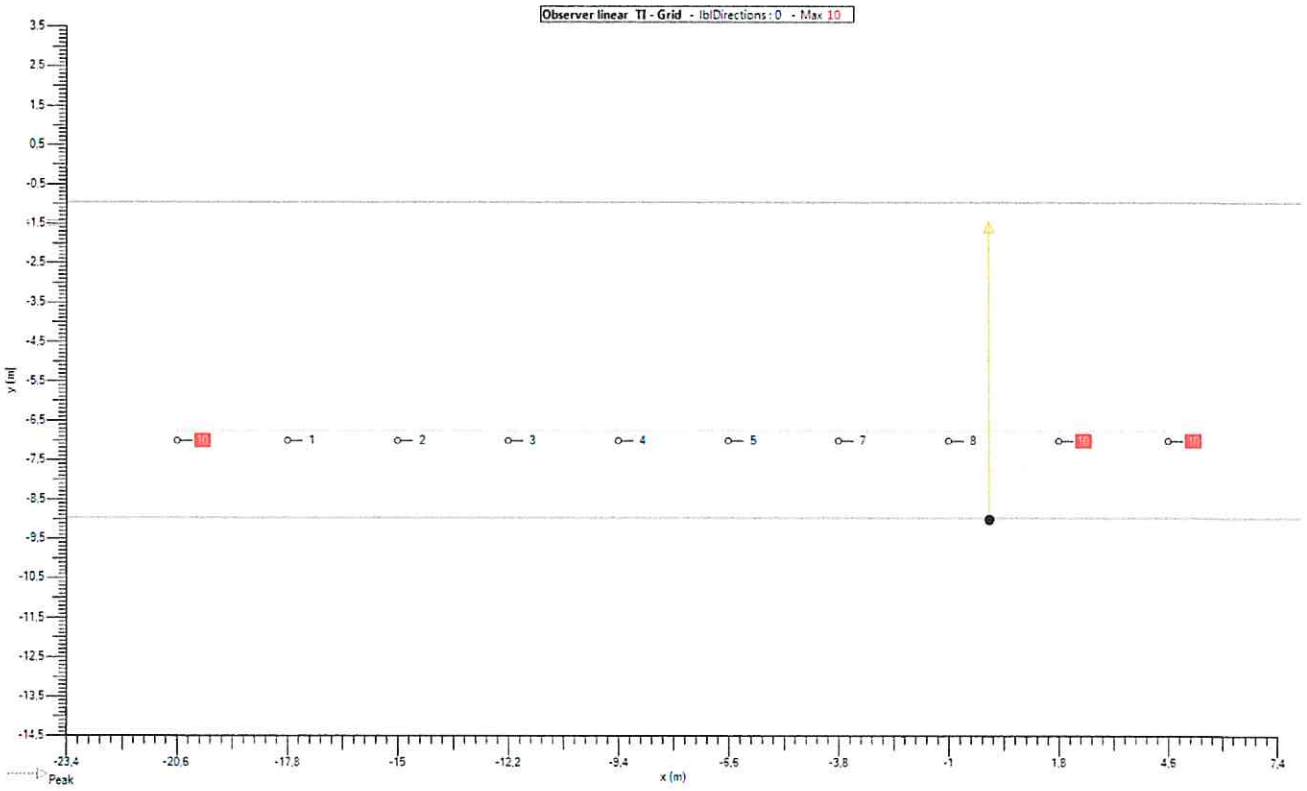


6.6. Multi-lanes (TI 1) - TI - Grid

Implantation

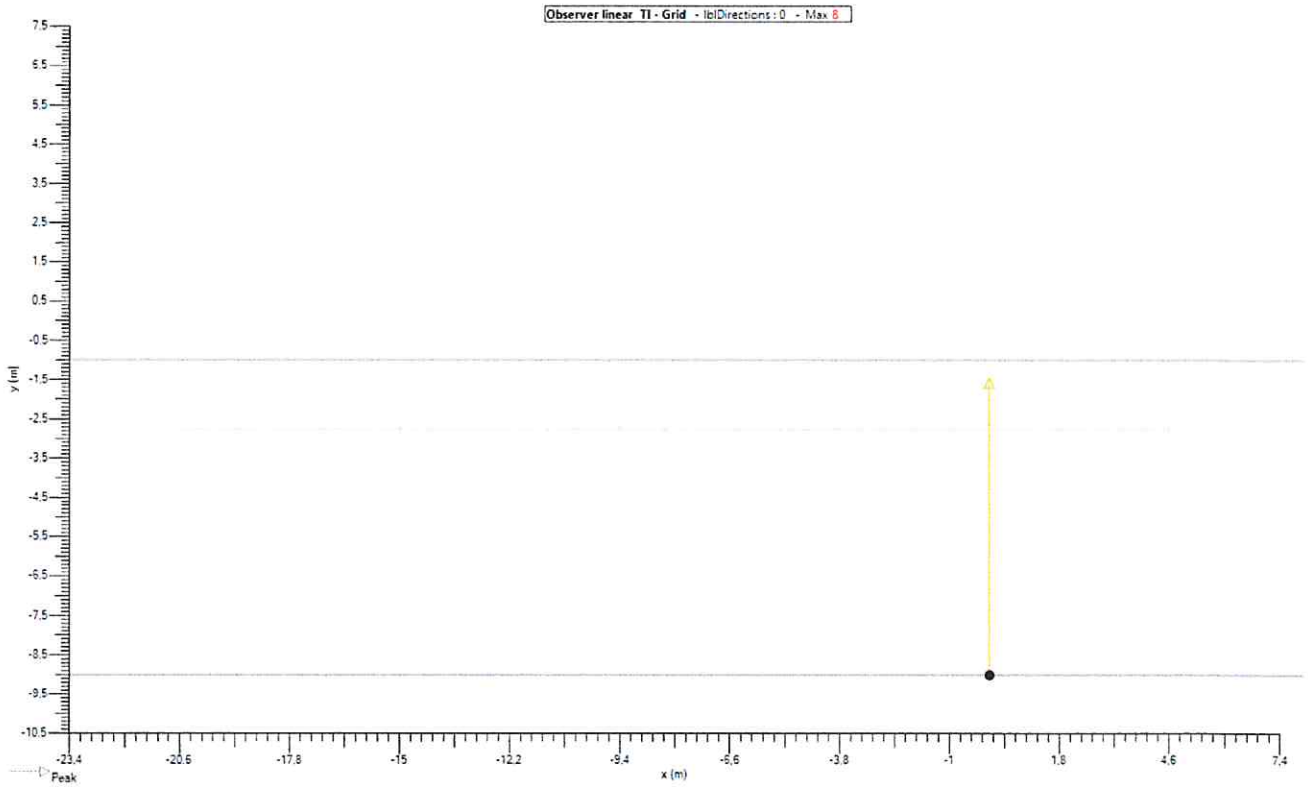


Values

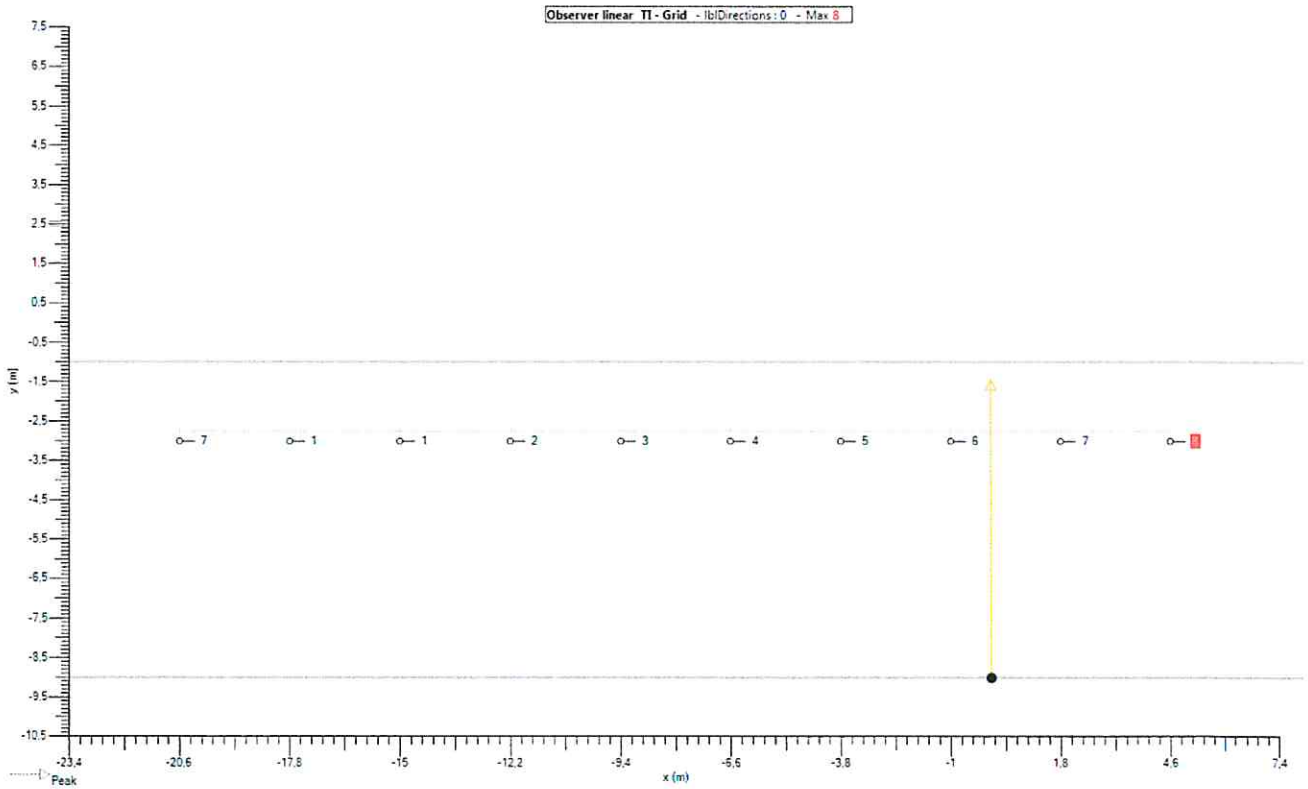


6.7. Multi-lanes (TI 2) - TI - Grid

Implantation



Values



7. Grids

7.1. Multi-lanes (LU)

General

Type	Grid rectangular XY
Enabled	☑
Colour	

Geometry

Origin	**X** 1,40 m	**Y** -7,33 m	**Z** 0,00 m
Rotation	**X** 0,0 °	**Y** 0,0 °	**Z** 0,0 °
Dimension	**Count X** 10	**Count Y** 6	
	Spacing X 2,80 m	**Spacing Y** 1,33 m	
	Size X 25,20 m	**Size Y** 6,67 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** -6,00 m	**Z** 1,50 m
Rotation	**X** 0,0 °	**Y** 0,0 °	**Z** 0,0 °
Dimension	**Count** 10	**Spacing** 2,80 m	**Size** 25,20 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** -2,00 m	**Z** 1,50 m
Rotation	**X** 0,0 °	**Y** 0,0 °	**Z** 0,0 °
Dimension	**Count** 10	**Spacing** 2,80 m	**Size** 25,20 m