



AUSFÜHRUNGSPROJEKT

PROGETTO ESECUTIVO

23.02.S.244.13.1
Neue Einfahrt ins Gadertal mit
Rienzbrücke und Tunnel Pflaurenz
BAULOS KLOSTERWALD
TECHNISCHE ANLAGEN

23.02.S.244.13.1
Nuovo accesso Val Badia con ponte
sulla Rienza e galleria Floronzo
LOTTO BOSCO DEL CONVENTO
IMPIANTI TECNICI

Bauherr - Comittente:

Autonome Provinz Bozen - Südtirol
Amt für Straßenbau Nord-Ost - 10.3

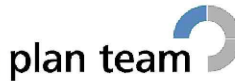
Prov. aut. di Bolzano - Alto Adige
Ufficio tecnico strade nord-est - 10.3

Planinhalt - Contenuto:

Betriebstechnische Ausstattung
Beleuchtungsberechnungen
Tunnel

Impianti tecnologici
Calcoli illuminotecnici
Galleria

Bauleitung - Direzione lavori



KAUER
Ingenieure - Ingegneri
DOTT. ING. MARIO VALDEMARIN
DR. ING. DIETER SCHÖLZHORN

Die Behörde - l'amministrazione

Version - Versione

Verfasser:
Autore: EUT - Fischnaller

Datum:
Data: 23.07.2020

Maßstab:
Scala:

Datei:
File:

Projekt Nr.:
N.° progetto: 20-023

Plangröße:
Dimensioni tavola:

Index:
Indice: 0

Anlage Nr.:
N.° allegato: A.2.6

Beleuchtungsberechnungen / Calcoli illuminotecnici

- Durchfahrtsbeleuchtung / Illuminazione permanente
- Einfahrtsbeleuchtung Portal Süd
Illuminazione di rinforzo portale Sud
- Einfahrtsbeleuchtung Portal Nord
Illuminazione di rinforzo portale Nord

Bemerkung:

- 1) Den beleuchtungstechnischen Berechnungen liegt ein Anwendung Programm in Anlehnung an die EN CEI UNI Normen in italienischer Sprache zu Grunde. Die Ergebnisse stehen daher teilweise in deutscher Sprache nicht zur Verfügung.
- 2) Für die Beleuchtungsberechnung sind die technischen Daten und Parameter von definierten Musterleuchten erforderlich. Modell- und Markenangaben in den Berechnungen dienen allein als Bezug für die Berechnungen.
- 3) Verwendete Software: Oxytech, Litestar Pro, Ver. 06.02.001 (18/06/2020)

Nota:

- 1) I calcoli tecnici sono alla base di un programma d'utilizzo in accostamento alle vigenti normative EN CEI UNI in lingua italiana. Per questo motivo parte dei risultati non sono disponibili in lingua tedesca.
 - 2) Per il calcolo illuminotecnico servono caratteristiche tecniche di campioni di apparecchi illuminanti. Indicazioni di marche e modelli di apparecchi illuminanti nei calcoli illuminotecnici sono da intendere solamente come riferimento per i calcoli illuminotecnici.
 - 3) Software utilizzato: Oxytech, Litestar Pro, Ver. 06.02.001 (18/06/2020)
-

Bauvorhaben: 23.02.S.244.13
Einfahrt ins Gadertal mit
Rienzbrücke und Tunnel Pflaurenz
Baulos: "Klosterwald"
Technologische Anlagen

Opera: 23.02.S.244.13
Accesso Val Badia con
ponte sulla Rienza e galleria Floronzo
Lotto: "Bosco del convento"
Impianti tecnologici

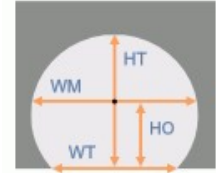
Durchfahrtsbeleuchtung
Illuminazione permanente

1. Dati Riepilogativi Progetto e Risultati

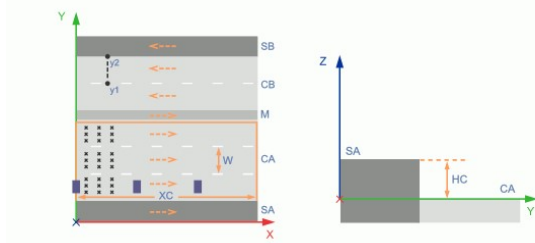
1.1 Informazioni Area

Osservatore Fisso (UNI 11095-2011+2019 - Italia)

Fornice Circolare (D)
 Larghezza (WT) 9.70 m
 Altezza (HT) 6.75 m
 Altezza (HO) 1.63 m
 Diametro (WM) 10.23 m
 Alt.Parete Attiva 3.00 m
 Col.Parete Attiva (255,249,239) 97%
 Colore Soffitto (0,0,0) 0%

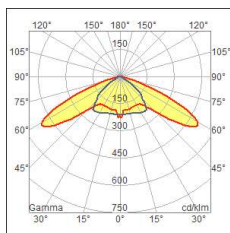


Zona	Tipo Zona	Corsia	Senso di Marcia	Larghezza [m] (W)	y1 [m]	y2 [m]	Pt.Calc.Y (E)	Pt.Calc.Y (L)	Alt. Zona [m] (HC)	Tabella R	Coeff.Rifl. Fattore q0
1. Marciapiede APista Ciclo/Pedonal	Marciapiede		--->	1.35	0.00	1.35	3	3	0.15		0.3000
2. Carreggiata ACarrabile				7.00	1.35	8.35	5		0.00	C2	0.0700
	2.1	Corsia 1	--->	3.50	1.35	4.85		3			
	2.2	Corsia 2	<---	3.50	4.85	8.35		3			
3. Marciapiede EPista Ciclo/Pedonal	Marciapiede		<---	1.35	8.35	9.70	3	3	0.15		0.3000



1.2 Informazioni Apparecchi/Rilievi

Rif.	Produttore Nome Apparecchio (Nome Rilievo)	Codice Apparecchio (Codice Rilievo)	Flusso [lm]	Coeff. Mant.	Dimmer	Colore RGB	Apparecchi n.	Rif.Sorg.	Sorgenti n.
A	AEC ILLUMINAZIONE SRL Galileo 1 Tunnel 0F8 SS-6W 4.5-(17-077b-2013) (Galileo 1 Tunnel 0F8 SS-6W 4.5)	Galileo 1 Tunnel 0F8 SS-6W 4.5-(17-077b-2013)	4.5	0.80	100 %	255,255,255	31	Sorg-A	1

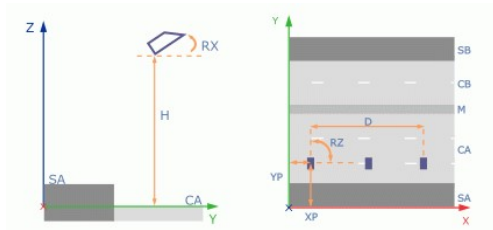


1.3 Informazioni Sorgenti

Rif.Sorg.	Produttore	Nome	Codice	Potenza [W]	Corrente [A]	Flusso [lm]	Colore [K]	n.
Sorg-A		L-GAL1-0F8-4000-525-1M-70-25	L-GAL1-0F8-4000-525-1M-70-25	52.00	0.0000	6730	4000	31

1.4 Dati Installazione Apparecchi

Nome Fila	Rif.	Circuito	Pos.X (XP) [m]	Pos.Y (YP) [m]	Altez.App. [m] (H)	Num. Apparecchi	Interd. [m] (D)	Incr.%	Tratto [m]	Ang.Incl. [°] (RX)	Ang.Rot.App. [°] (RZ)	Ang.Incl.Lat. [°] (RY)
Fila A	A		0.00	3.85	5.40	31	10.00	0.00	300.00	0	180	0



1.5 Risultati dei Calcoli e Parametri di Uniformità

Riepilogo Risultati dei Calcoli

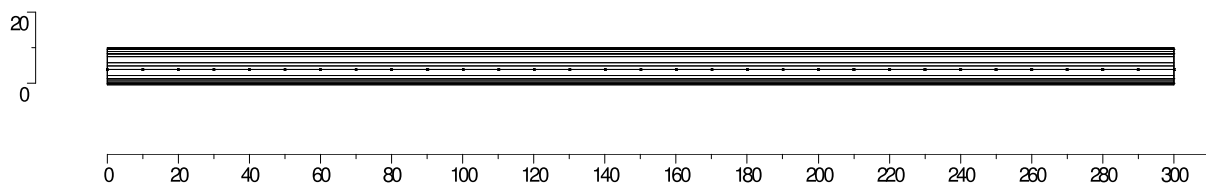
EN 13201:2015						
1 - Marciapiede A	Risultati	EAV = 48.65 lux	EMIN = 37.47 lux			
2 - Carreggiata A	Risultati	LAV = 3.04 cd/m ²	Uo(L) = 0.42	UL = 0.38	fTI = 5 %	REI = 0.21 R=0.27 L=0.21
	Oss. 1) [x=-60.00 y=3.10] m	LAV = 3.04 cd/m ² *	Uo(L) = 0.42 *	UL = 0.38 *		
	Oss. 2) [x=360.00 y=6.60] m	LAV = 3.05 cd/m ²	Uo(L) = 0.43	UL = 0.53		
	Oss.Ti 1) [x=288.27 y=3.10] m				fTI = 4.79 %	
	Oss.Ti 2) [x=310.73 y=6.60] m				fTI = 5.09 % *	
	LV = 0.20					
3 - Marciapiede B	Risultati	EAV = 31.45 lux	EMIN = 18.51 lux			

Inquinamento Luminoso

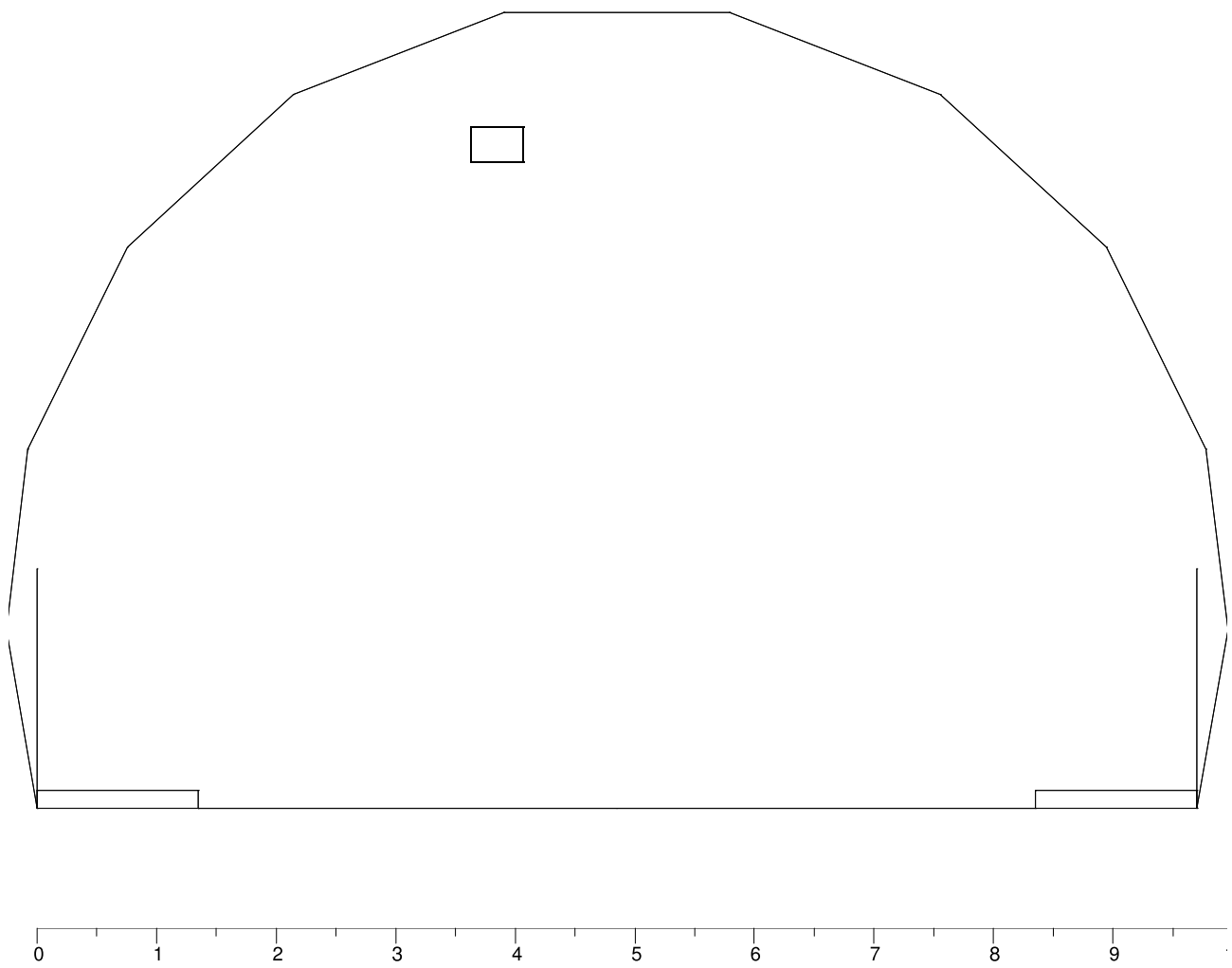
Rapporto Medio - Rn -
0.00 %

2. Viste Ambiente

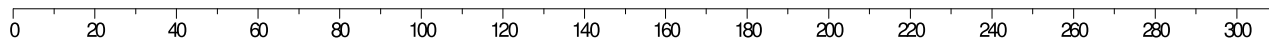
2.1 Vista 2D in Pianta



2.2 Vista Laterale

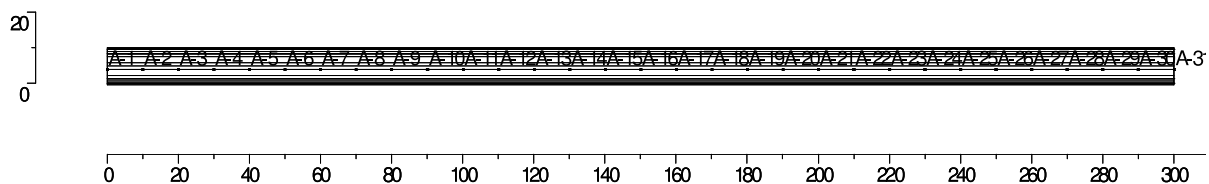


2.3 Vista Frontale



3. Dati Riepilogativi degli Apparecchi

3.1 Vista 2D in Pianta con Apparecchi



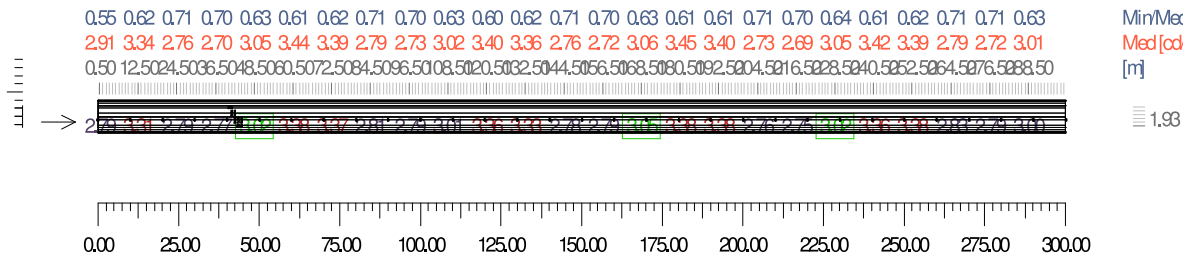
4. Tabelle dei Risultati

4.1 Valori delle Luminanze su: 2 - Carreggiata A - Oss. 1 [x=-60.00 y=3.10] m

Risultati	Medio	Minimo	Massimo	Min/Medio	Min/Max	Medio/Max
Luminanza L	3.03 cd/m ²	1.29 cd/m ²	4.76 cd/m ²	0.42 1:2.35	0.27 1:3.69	0.64 1:1.57

Osservatore
Tipo Calcolo

[x=-60.00 y=3.10 z=1.50] m => [x=30.00 y=3.10 z=0.00] m
Dir.+Indir. (Accuratezza:2)

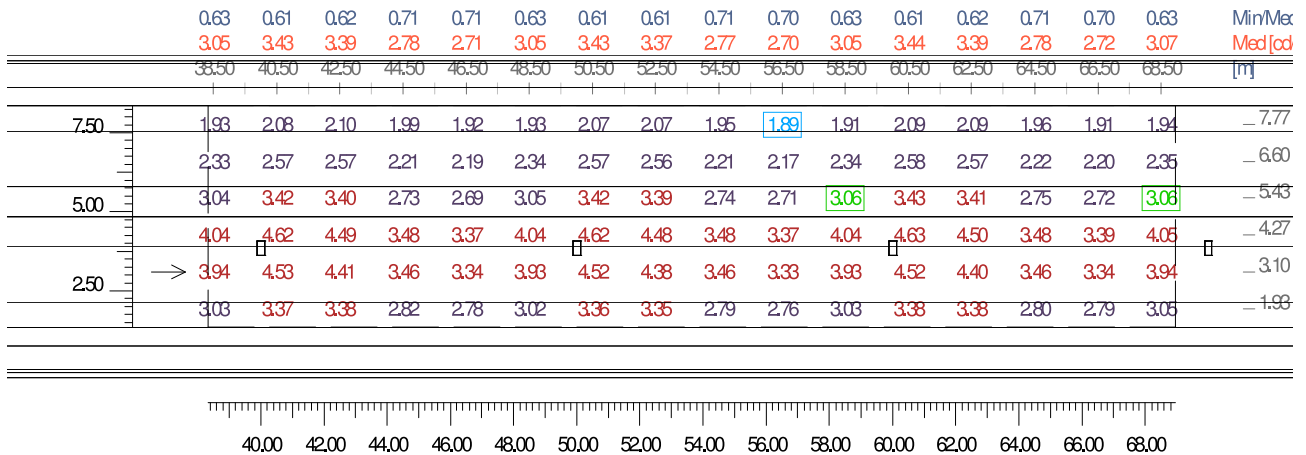


4.2 Valori delle Luminanze su: 2 - Carreggiata A [Uniformità] - Oss. 1 [x=-60.00 y=3.10] m

Risultati	Medio	Minimo	Massimo	Min/Medio	Min/Max	Medio/Max
Luminanza L	3.07 cd/m ²	1.89 cd/m ²	4.75 cd/m ²	0.62 1:1.62	0.40 1:2.51	0.65 1:1.55

Osservatore
Tipo Calcolo

[x=-60.00 y=3.10 z=1.50] m => [x=30.00 y=3.10 z=0.00] m
Dir.+Iindir. (Accuratezza:2)

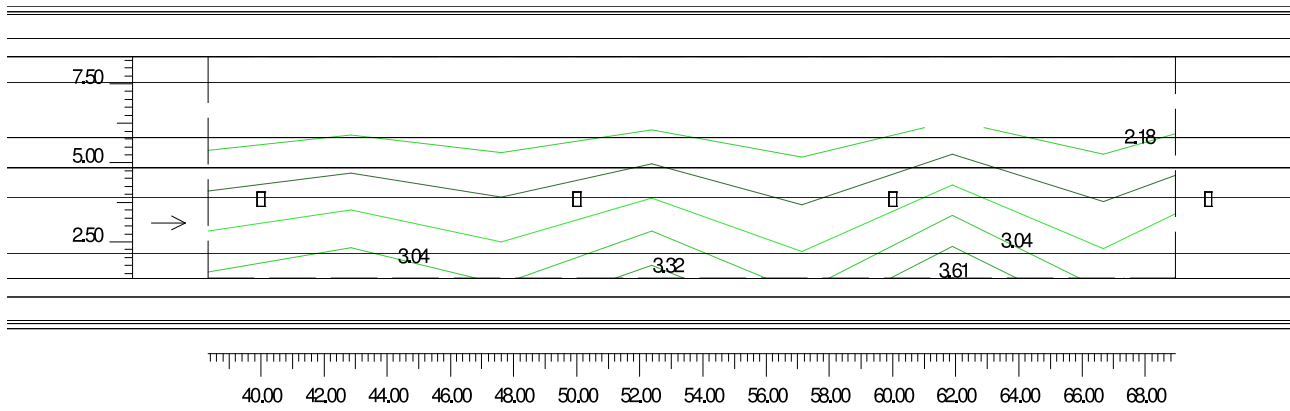


4.3 Curve Isoluminanze su: 2 - Carreggiata A [Uniformità] - Oss. 1 [x=-60.00 y=3.10] m

Risultati	Medio	Minimo	Massimo	Min/Medio	Min/Max	Medio/Max
Luminanza L	3.07 cd/m ²	1.89 cd/m ²	4.75 cd/m ²	0.62 1:1.62	0.40 1:2.51	0.65 1:1.55

Osservatore
 Tipo Calcolo

[x=-60.00 y=3.10 z=1.50] m => [x=30.00 y=3.10 z=0.00] m
 Dir.+Indir. (Accuratezza:2)



Bauvorhaben: 23.02.S.244.13
Einfahrt ins Gadertal mit
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Technologische Anlagen

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Lotto: "Bosco del convento"
Impianti tecnologici

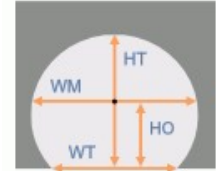
Einfahrtsbeleuchtung Portal Nord
Illuminazione di rinforzo portale Nord

1. Dati Riepilogativi Progetto e Risultati

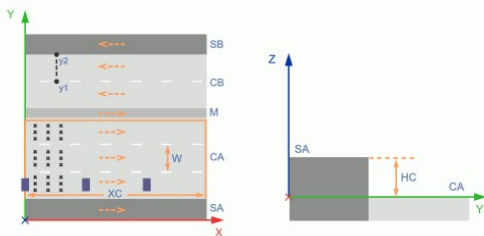
1.1 Informazioni Area

Osservatore Fisso (UNI 11095-2011+2019 - Italia)

Fornice Circolare (D)
 Larghezza (WT) 9.70 m
 Altezza (HT) 6.75 m
 Altezza (HO) 1.63 m
 Diametro (WM) 10.23 m
 Alt.Parete Attiva 3.00 m
 Col.Parete Attiva (255,249,239) 97%
 Colore Soffitto (0,0,0) 0%

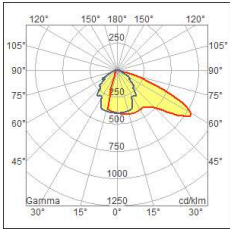
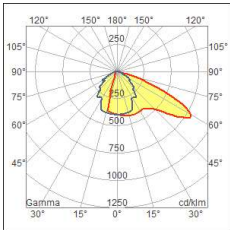
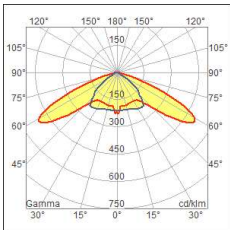


Zona	Tipo Zona	Corsia	Senso di Marci	Larghezza [m] (W)	y1 [m]	y2 [m]	Pt.Calc. (E)	YPt.Calc. (L)	YAlt. [m] (HC)	Zona Tabella R	Coeff. Rifl. Fattore q0
1. Gehsteig Richtung Pista Ciclo/Pedor	Gehsteig Richtung	1	---	1.35	0.00	1.35	3	3	0.15		0.3000
2. Fahrbahn Carrabile	Fahrspur Richtung	2.1	---	7.00	1.35	8.35	5		0.00	C2	0.0700
	Fahrspur Richtung	2.2	---	3.50	1.35	4.85		3			
	Fahrspur Richtung		---	3.50	4.85	8.35		3			
3. Gehsteig Richtung Pista Ciclo/Pedor	Gehsteig Richtung	3	---	1.35	8.35	9.70	3	3	0.15		0.3000



1.2 Informazioni Apparecchi/Rilievi

Rif.	Produttore Nome Apparecchio (Nome Rilievo)	Codice Apparecchio (Codice Rilievo)	Flusso [lm]	Coeff. Mant.	Dimmer	Colore RGB	Apparecchi n.	Rif.Sorg.	Sorgenti n.
A	AEC ILLUMINAZIONE SRL Galileo 2 Tunnel EB 0F6 ASC-6W (Galileo 2 Tunnel EB 0F6 ASC-6W)	Galileo 2 Tunnel EB 0F6 ASC-6W34730.00 (17-077b-1921)	6210.00	0.80	100 %	255,255,255	15	Sorg-A	1
B	AEC ILLUMINAZIONE SRL Galileo 1 Tunnel EB 0F6 ASC-6W (Galileo 1 Tunnel EB 0F6 ASC-6W)	Galileo 1 Tunnel EB 0F6 ASC-6W 6210.00 (17-077b-1931)	6210.00	0.80	100 %	255,255,255	8	Sorg-B	1

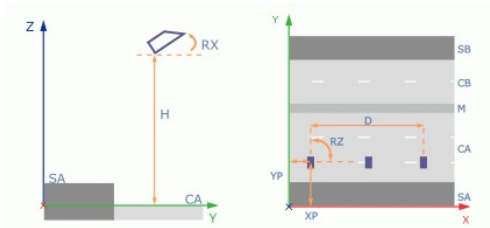
Rif.	Produttore Nome Apparecchio (Nome Rilievo)	Codice Apparecchio (Codice Rilievo)	Flusso [lm]	Coeff. Mant.	Dimmer	Colore RGB	Apparecchi n.	Rif.Sorg.	Sorgenti n.
C	AEC ILLUMINAZIONE SRL Galileo 1 Tunnel EB 0F6 ASC-6W (Galileo 1 Tunnel EB 0F6 ASC-6W)	Galileo 1 Tunnel EB 0F6 ASC-6W12190.00 (17-077b-1929)	12190.00	0.80	100 %	255,255,255	3	Sorg-C	1
									
D	AEC ILLUMINAZIONE SRL Galileo 1 Tunnel EB 0F6 ASC-6W (Galileo 1 Tunnel EB 0F6 ASC-6W)	Galileo 1 Tunnel EB 0F6 ASC-6W17920.00 (17-077b-1927)	17920.00	0.80	100 %	255,255,255	3	Sorg-D	1
									
E	AEC ILLUMINAZIONE SRL Galileo 1 Tunnel 0F8 SS-6W 4.5-1 (Galileo 1 Tunnel 0F8 SS-6W 4.5-1)	Galileo 1 Tunnel 0F8 SS-6W 4.5-1 (17-077b-2013)	6730.00	0.90	100 %	255,255,255	37	Sorg-E	1
									

1.3 Informazioni Sorgenti

Rif.Sorg.	Produttore	Nome	Codice	Potenza [W]	Corrente [A]	Flusso [lm]	Colore [K]	n.
Sorg-A		L-GAL2-0F6-4000-700-6M-70-25	L-GAL2-0F6-4000-700-6M-70-25	300.00	0.0000	34730	4000	15
Sorg-B		L-GAL1-0F6-4000-700-1M-70-25	L-GAL1-0F6-4000-700-1M-70-25	52.00	0.0000	6210	4000	8
Sorg-C		L-GAL1-0F6-4000-700-2M-70-25	L-GAL1-0F6-4000-700-2M-70-25	102.00	0.0000	12190	4000	3
Sorg-D		L-GAL1-0F6-4000-700-3M-70-25	L-GAL1-0F6-4000-700-3M-70-25	150.00	0.0000	17920	4000	3
Sorg-E		L-GAL1-0F8-4000-525-1M-70-25	L-GAL1-0F8-4000-525-1M-70-25	52.00	0.0000	6730	4000	37

1.4 Dati Installazione Apparecchi

Nome Fila	Rif.	Circuito	Pos.X (XP) [m]	Pos.Y (YP) [m]	Altez.App. [m] (H)	Num. Apparecchi	Interd. [m] (D)	Incr.%	Tratto [m]	Ang.Incl. [°] (RX)	Ang.Rot.App. [°] (RZ)	Ang.Incl.Lat. [°] (RY)
Typ A	E		4.00	3.85	5.40	37	10.00	0.00	360.00	0	0	0
Typ C	A		5.00	3.85	5.40	5	3.00	0.00	12.00	0	180	0
Typ C	A		21.00	3.85	5.40	4	3.50	0.00	10.50	0	180	0
Typ C	A		35.00	3.85	5.40	5	5.00	0.00	20.00	0	180	0
Typ C	A		62.00	3.85	5.40	1	5.00	0.00	0.00	0	180	0
Typ D	D		69.00	3.85	5.40	3	7.00	0.00	14.00	0	180	0
Typ E	C		90.00	3.85	5.40	3	7.00	0.00	14.00	0	180	0
Typ F	B		111.00	3.85	5.40	4	7.00	0.00	21.00	0	180	0
Typ F	B		142.00	3.85	5.40	2	10.00	0.00	10.00	0	180	0
Typ F	B		166.00	3.85	5.40	2	14.00	0.00	14.00	0	180	0



1.5 Risultati dei Calcoli e Parametri di Uniformità

Riepilogo Risultati dei Calcoli

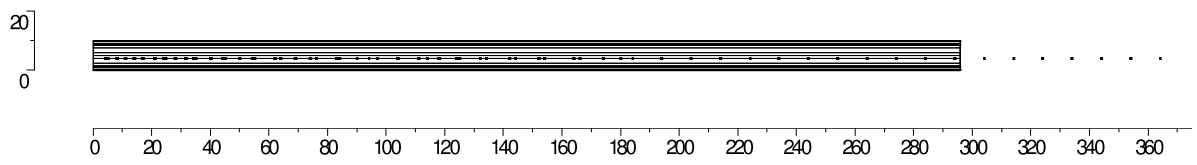
EN 13201:2015						
1 - Gehsteig Richtung Süd	Risultati		$E_{AV} = 192.55 \text{ lux}$	$E_{MIN} = 44.83 \text{ lux}$		
2 - Fahrbahn	Risultati		$L_{AV} = 9.74 \text{ cd/m}^2$	$U_o(L) = 0.13$	$U_L = 0.04$	$f_{TI} = 6 \%$
						$R_{EI} = 0.17$
						$R = 0.23$
						$L = 0.17$
		Oss. 1) [x=-60.00 y=3.10] m	$L_{AV} = 15.83 \text{ cd/m}^2$	$U_o(L) = 0.13 *$	$U_L = 0.04 *$	
		Oss. 2) [x=356.00 y=6.60] m	$L_{AV} = 9.74 \text{ cd/m}^2 *$	$U_o(L) = 0.21$	$U_L = 0.08$	
		Oss.Ti 1) [x=93.24 y=3.10] m				$f_{TI} = 6.18 \%$
		Oss.Ti 2) [x=84.73 y=6.60] m				$f_{TI} = 3.24 \%$
		$L_v = 2.81$				
3 - Gehsteig Richtung Nord	Risultati		$E_{AV} = 109.51 \text{ lux}$	$E_{MIN} = 24.86 \text{ lux}$		

Inquinamento Luminoso

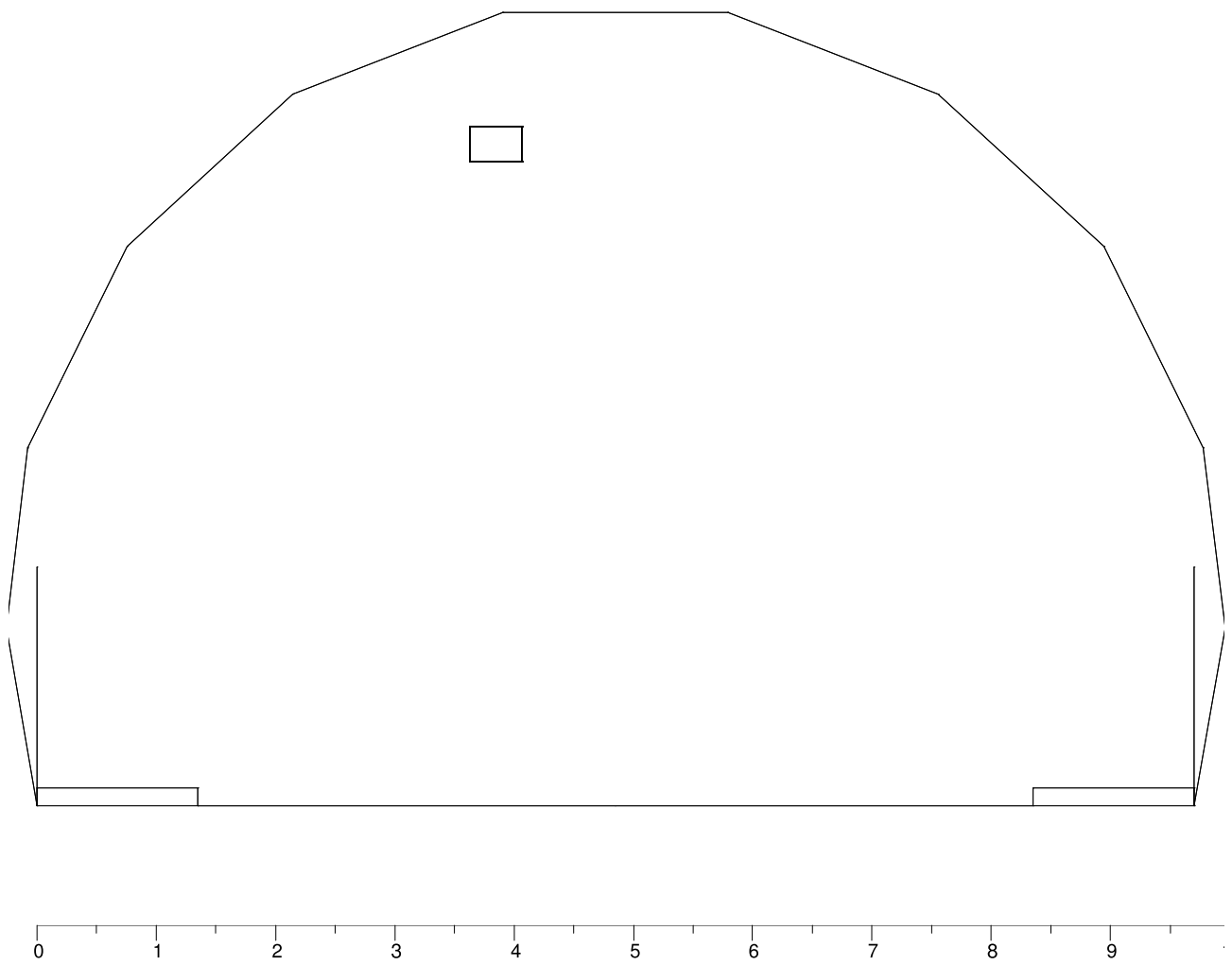
Rapporto Medio - Rn -
0.00 %

2. Viste Ambiente

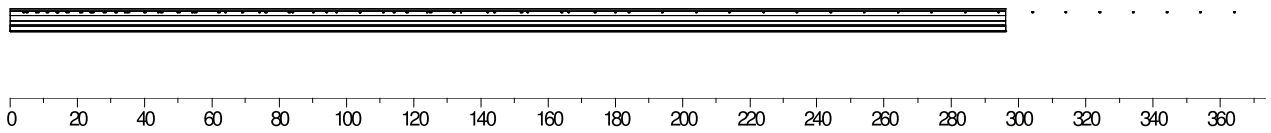
2.1 Vista 2D in Pianta



2.2 Vista Laterale

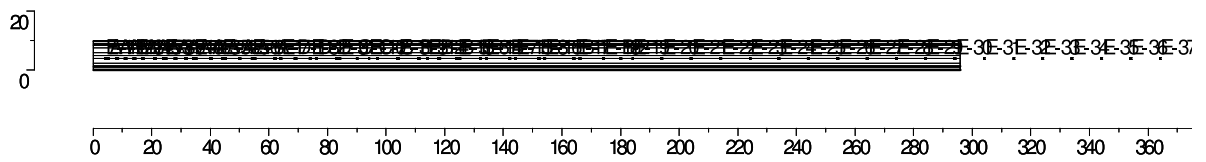


2.3 Vista Frontale



3. Dati Riepilogativi degli Apparecchi

3.1 Vista 2D in Pianta con Apparecchi



3.3 Tabella Riepilogativa Puntamenti

Struttura	Rif.	Codice Apparecchio	Dimmer	Posizione Apparecchi			Rotazione Apparecchi			Puntamenti			R.Asse [°]
				x[m]	y[m]	z[m]	rx[°]	ry[°]	rz[°]	x[m]	y[m]	z[m]	
A-1		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	62.00	3.85	5.40	0.0	-0.0	180.0	62.00	3.85	-0.00	0.0
A-2		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	35.00	3.85	5.40	0.0	-0.0	180.0	35.00	3.85	-0.00	0.0
A-3		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	40.00	3.85	5.40	0.0	-0.0	180.0	40.00	3.85	-0.00	0.0
A-4		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	45.00	3.85	5.40	0.0	-0.0	180.0	45.00	3.85	-0.00	0.0
A-5		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	50.00	3.85	5.40	0.0	-0.0	180.0	50.00	3.85	-0.00	0.0
A-6		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	55.00	3.85	5.40	0.0	-0.0	180.0	55.00	3.85	-0.00	0.0
A-7		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	21.00	3.85	5.40	0.0	-0.0	180.0	21.00	3.85	-0.00	0.0
A-8		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	24.50	3.85	5.40	0.0	-0.0	180.0	24.50	3.85	-0.00	0.0
A-9		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	28.00	3.85	5.40	0.0	-0.0	180.0	28.00	3.85	-0.00	0.0
A-10		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	31.50	3.85	5.40	0.0	-0.0	180.0	31.50	3.85	-0.00	0.0
A-11		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	5.00	3.85	5.40	0.0	-0.0	180.0	5.00	3.85	-0.00	0.0
A-12		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	8.00	3.85	5.40	0.0	-0.0	180.0	8.00	3.85	-0.00	0.0
A-13		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	11.00	3.85	5.40	0.0	-0.0	180.0	11.00	3.85	-0.00	0.0
A-14		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	14.00	3.85	5.40	0.0	-0.0	180.0	14.00	3.85	-0.00	0.0
A-15		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	17.00	3.85	5.40	0.0	-0.0	180.0	17.00	3.85	-0.00	0.0
B-1		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-1	100 %	166.00	3.85	5.40	0.0	-0.0	180.0	166.00	3.85	-0.00	0.0
B-2		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-1	100 %	180.00	3.85	5.40	0.0	-0.0	180.0	180.00	3.85	-0.00	0.0
B-3		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-1	100 %	111.00	3.85	5.40	0.0	-0.0	180.0	111.00	3.85	-0.00	0.0
B-4		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-1	100 %	118.00	3.85	5.40	0.0	-0.0	180.0	118.00	3.85	-0.00	0.0
B-5		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-1	100 %	125.00	3.85	5.40	0.0	-0.0	180.0	125.00	3.85	-0.00	0.0
B-6		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-1	100 %	132.00	3.85	5.40	0.0	-0.0	180.0	132.00	3.85	-0.00	0.0
B-7		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-1	100 %	142.00	3.85	5.40	0.0	-0.0	180.0	142.00	3.85	-0.00	0.0
B-8		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-1	100 %	152.00	3.85	5.40	0.0	-0.0	180.0	152.00	3.85	-0.00	0.0
C-1		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-2	100 %	90.00	3.85	5.40	0.0	-0.0	180.0	90.00	3.85	-0.00	0.0
C-2		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-2	100 %	97.00	3.85	5.40	0.0	-0.0	180.0	97.00	3.85	-0.00	0.0
C-3		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-2	100 %	104.00	3.85	5.40	0.0	-0.0	180.0	104.00	3.85	-0.00	0.0
D-1		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-3	100 %	69.00	3.85	5.40	0.0	-0.0	180.0	69.00	3.85	-0.00	0.0
D-2		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-3	100 %	76.00	3.85	5.40	0.0	-0.0	180.0	76.00	3.85	-0.00	0.0
D-3		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-3	100 %	83.00	3.85	5.40	0.0	-0.0	180.0	83.00	3.85	-0.00	0.0
E-1		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	4.00	3.85	5.40	0.0	-0.0	0.0	4.00	3.85	-0.00	0.0
E-2		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	14.00	3.85	5.40	0.0	-0.0	0.0	14.00	3.85	-0.00	0.0
E-3		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	24.00	3.85	5.40	0.0	-0.0	0.0	24.00	3.85	-0.00	0.0
E-4		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	34.00	3.85	5.40	0.0	-0.0	0.0	34.00	3.85	-0.00	0.0
E-5		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	44.00	3.85	5.40	0.0	-0.0	0.0	44.00	3.85	-0.00	0.0
E-6		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	54.00	3.85	5.40	0.0	-0.0	0.0	54.00	3.85	-0.00	0.0
E-7		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	64.00	3.85	5.40	0.0	-0.0	0.0	64.00	3.85	-0.00	0.0
E-8		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	74.00	3.85	5.40	0.0	-0.0	0.0	74.00	3.85	-0.00	0.0
E-9		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	84.00	3.85	5.40	0.0	-0.0	0.0	84.00	3.85	-0.00	0.0
E-10		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	94.00	3.85	5.40	0.0	-0.0	0.0	94.00	3.85	-0.00	0.0
E-11		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	104.00	3.85	5.40	0.0	-0.0	0.0	104.00	3.85	-0.00	0.0
E-12		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	114.00	3.85	5.40	0.0	-0.0	0.0	114.00	3.85	-0.00	0.0
E-13		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	124.00	3.85	5.40	0.0	-0.0	0.0	124.00	3.85	-0.00	0.0
E-14		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	134.00	3.85	5.40	0.0	-0.0	0.0	134.00	3.85	-0.00	0.0
E-15		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	144.00	3.85	5.40	0.0	-0.0	0.0	144.00	3.85	-0.00	0.0
E-16		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	154.00	3.85	5.40	0.0	-0.0	0.0	154.00	3.85	-0.00	0.0
E-17		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	164.00	3.85	5.40	0.0	-0.0	0.0	164.00	3.85	-0.00	0.0
E-18		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	174.00	3.85	5.40	0.0	-0.0	0.0	174.00	3.85	-0.00	0.0
E-19		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	184.00	3.85	5.40	0.0	-0.0	0.0	184.00	3.85	-0.00	0.0
E-20		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	194.00	3.85	5.40	0.0	-0.0	0.0	194.00	3.85	-0.00	0.0
E-21		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	204.00	3.85	5.40	0.0	-0.0	0.0	204.00	3.85	-0.00	0.0
E-22		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	214.00	3.85	5.40	0.0	-0.0	0.0	214.00	3.85	-0.00	0.0
E-23		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	224.00	3.85	5.40	0.0	-0.0	0.0	224.00	3.85	-0.00	0.0
E-24		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	234.00	3.85	5.40	0.0	-0.0	0.0	234.00	3.85	-0.00	0.0
E-25		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	244.00	3.85	5.40	0.0	-0.0	0.0	244.00	3.85	-0.00	0.0
E-26		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	254.00	3.85	5.40	0.0	-0.0	0.0	254.00	3.85	-0.00	0.0
E-27		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	264.00	3.85	5.40	0.0	-0.0	0.0	264.00	3.85	-0.00	0.0
E-28		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	274.00	3.85	5.40	0.0	-0.0	0.0	274.00	3.85	-0.00	0.0
E-29		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	284.00	3.85	5.40	0.0	-0.0	0.0	284.00	3.85	-0.00	0.0
E-30		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	294.00	3.85	5.40	0.0	-0.0	0.0	294.00	3.85	-0.00	0.0
E-31		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	304.00	3.85	5.40	0.0	-0.0	0.0	304.00	3.85	-0.00	0.0
E-32		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	314.00	3.85	5.40	0.0	-0.0	0.0	314.00	3.85	-0.00	0.0
E-33		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	324.00	3.85	5.40	0.0	-0.0	0.0	324.00	3.85	-0.00	0.0
E-34		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	334.00	3.85	5.40	0.0	-0.0	0.0	334.00	3.85	-0.00	0.0
E-35		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	344.00	3.85	5.40	0.0	-0.0	0.0	344.00	3.85	-0.00	0.0
E-36		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	354.00	3.85	5.40	0.0	-0.0	0.0	354.00	3.85	-0.00	0.0
E-37		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	364.00	3.85	5.40	0.0	-0.0	0.0	364.00	3.85	-0.00	0.0

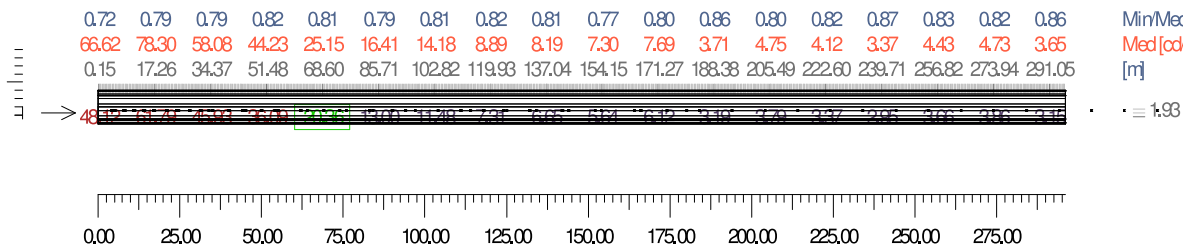
4. Tabelle dei Risultati

4.1 Valori delle Luminanze su: 2-1 (Fahrbahn - Fahrspur Richtung Süd) - Oss. 1 [x=-60.00 y=3.10] m

Risultati	Medio	Minimo	Massimo	Min/Medio	Min/Max	Medio/Max
Luminanza L	19.88 cd/m ²	2.89 cd/m ²	101.28 cd/m ²	0.15 1:6.87	0.03 1:34.99	0.20 1:5.09

Osservatore
 Tipo Calcolo

[x=-60.00 y=3.10 z=1.50] m => [x=30.00 y=3.10 z=0.00] m
 Dir.+Indir. (Accuratezza:2)

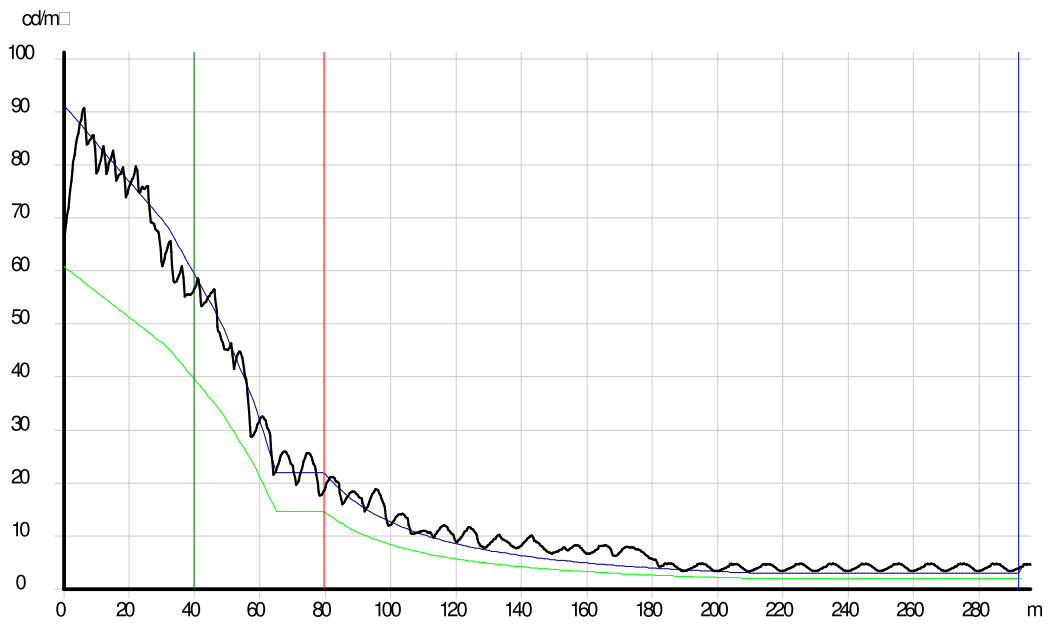


4.2 Curva di Luminanza su: 2-1 (Fahrbahn - Fahrspur Richtung Süd) - Oss. 1 [x=-60.00 y=3.10] m

Risultati	Medio	Minimo	Massimo	Min/Medio	Min/Max	Medio/Max
Luminanza L	19.88 cd/m ²	2.89 cd/m ²	101.28 cd/m ²	0.15 1:6.87	0.03 1:34.99	0.20 1:5.09

Osservatore
Tipo Calcolo

[x=-60.00 y=3.10 z=1.50] m => [x=30.00 y=3.10 z=0.00] m
Dir.+Iindir. (Accuratezza:2)



Bauvorhaben: 23.02.S.244.13
Einfahrt ins Gadertal mit
Rienzbrücke und Tunnel Pflaurenz
Baulos: "Klosterwald"
Technologische Anlagen

Opera: 23.02.S.244.13
Accesso Val Badia con
ponte sulla Rienza e galleria Floronzo
Lotto: "Bosco del convento"
Impianti tecnologici

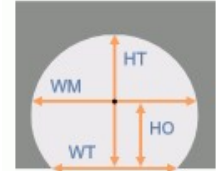
Einfahrtsbeleuchtung Portal Süd
Illuminazione di rinforzo portale Sud

1. Dati Riepilogativi Progetto e Risultati

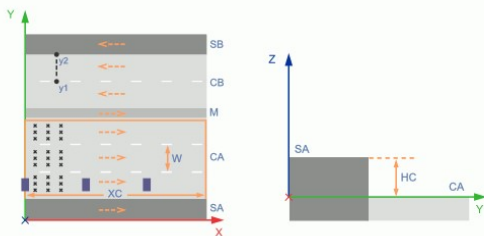
1.1 Informazioni Area

Osservatore Fisso (UNI 11095-2011+2019 - Italia)

Fornice Circolare (D)
 Larghezza (WT) 9.70 m
 Altezza (HT) 6.75 m
 Altezza (HO) 1.63 m
 Diametro (WM) 10.23 m
 Alt.Parete Attiva 3.00 m
 Col.Parete Attiva (255,249,239) 97%
 Colore Soffitto (0,0,0) 0%

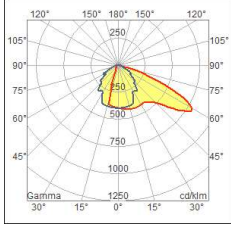
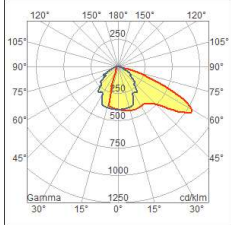
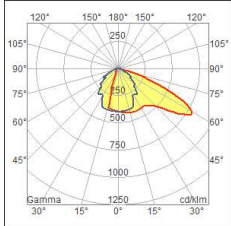
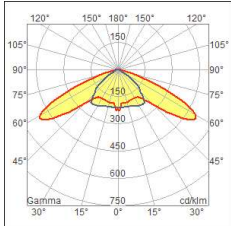


Zona	Tipo Zona	Corsia	Senso di Marci	Larghezza [m] (W)	y1 [m]	y2 [m]	Pt.Calc. (E)	YPt.Calc. (L)	YAlt. [m] (HC)	Zona Tabella R	Coeff. Rifl. Fattore q0
1. Gehsteig	Richtung Pista Ciclo/Pedor	Gehsteig	Richtung I	1.35	0.00	1.35	3	3	0.15		0.3000
2. Fahrbahn	Carrabile			7.00	1.35	8.35	5		0.00	C2	0.0700
	2.1	Fahrspur	Richtung I	3.50	1.35	4.85		3			
	2.2	Fahrspur	Richtung I	3.50	4.85	8.35		3			
3. Gehsteig	Richtung Pista Ciclo/Pedor	Gehsteig	Richtung I	1.35	8.35	9.70	3	3	0.15		0.3000



1.2 Informazioni Apparecchi/Rilievi

Rif.	Produttore Nome Apparecchio (Nome Rilievo)	Codice Apparecchio (Codice Rilievo)	Flusso [lm]	Coeff. Mant.	Dimmer	Colore RGB	Apparecchi n.	Rif.Sorg.	Sorgenti n.
A	AEC ILLUMINAZIONE SRL Galileo 1 Tunnel EB 0F6 ASC-6W (Galileo 1 Tunnel EB 0F6 ASC-6W)	Galileo 1 Tunnel EB 0F6 ASC-6W (17-077b-1931)	6210.00	0.80	100 %	255,255,255	6	Sorg-A	1
B	AEC ILLUMINAZIONE SRL Galileo 1 Tunnel EB 0F6 ASC-6W (Galileo 1 Tunnel EB 0F6 ASC-6W)	Galileo 1 Tunnel EB 0F6 ASC-6W (17-077b-1929)	12190.00	0.80	100 %	255,255,255	2	Sorg-B	1

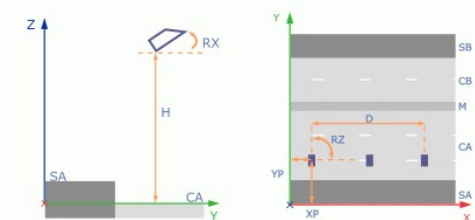
Rif.	Produttore Nome Apparecchio (Nome Rilievo)	Codice Apparecchio (Codice Rilievo)	Flusso [lm]	Coeff. Mant.	Dimmer	Colore RGB	Apparecchi n.	Rif.Sorg.	Sorgenti n.
C	AEC ILLUMINAZIONE SRL Galileo 1 Tunnel EB 0F6 ASC-6W (Galileo 1 Tunnel EB 0F6 ASC-6W)	Galileo 1 Tunnel EB 0F6 ASC-6W (17-077b-1927)	17920.00	0.80	100 %	255,255,255	6	Sorg-C	1
									
D	AEC ILLUMINAZIONE SRL Galileo 2 Tunnel EB 0F6 ASC-6W (Galileo 2 Tunnel EB 0F6 ASC-6W)	Galileo 2 Tunnel EB 0F6 ASC-6W (17-077b-1921)	34730.00	0.80	100 %	255,255,255	3	Sorg-D	1
									
E	AEC ILLUMINAZIONE SRL Galileo 3 Tunnel EB 0F6 ASC-6W (Galileo 3 Tunnel EB 0F6 ASC-6W)	Galileo 3 Tunnel EB 0F6 ASC-6W (17-077b-1915)	51040.00	0.80	100 %	255,255,255	13	Sorg-E	1
									
F	AEC ILLUMINAZIONE SRL Galileo 1 Tunnel 0F8 SS-6W 4.5-1 (Galileo 1 Tunnel 0F8 SS-6W 4.5-1)	Galileo 1 Tunnel 0F8 SS-6W 4.5-1 (17-077b-2013)	6730.00	0.90	100 %	255,255,255	37	Sorg-F	1
									

1.3 Informazioni Sorgenti

Rif.Sorg.	Produttore	Nome	Codice	Potenza [W]	Corrente [A]	Flusso [lm]	Colore [K]	n.
Sorg-A		L-GAL1-0F6-4000-700-1M-70-25	L-GAL1-0F6-4000-700-1M-70-25	52.00	0.0000	6210	4000	6
Sorg-B		L-GAL1-0F6-4000-700-2M-70-25	L-GAL1-0F6-4000-700-2M-70-25	102.00	0.0000	12190	4000	2
Sorg-C		L-GAL1-0F6-4000-700-3M-70-25	L-GAL1-0F6-4000-700-3M-70-25	150.00	0.0000	17920	4000	6
Sorg-D		L-GAL2-0F6-4000-700-6M-70-25	L-GAL2-0F6-4000-700-6M-70-25	300.00	0.0000	34730	4000	3
Sorg-E		L-GAL3-0F6-4000-700-9M-70-25	L-GAL3-0F6-4000-700-9M-70-25	450.00	0.0000	51040	4000	13
Sorg-F		L-GAL1-0F8-4000-525-1M-70-25	L-GAL1-0F8-4000-525-1M-70-25	52.00	0.0000	6730	4000	37

1.4 Dati Installazione Apparecchi

Nome Fila	Rif.	Circuito	Pos.X (XP) [m]	Pos.Y (YP) [m]	Altez.App. [m] (H)	Num. Apparecchi	Interd. [m] (D)	Incr.%	Tratto [m]	Ang.Incl. [°] (RX)	Ang.Rot.App. [°] (RZ)	Ang.Incl.Lat. [°] (RY)
Typ A	F		4.00	5.85	5.40	37	10.00	0.00	360.00	0	0	0
Typ B	E		3.00	5.85	5.40	6	3.00	0.00	15.00	15	195	0
Typ B	E		22.00	5.85	5.40	5	4.00	0.00	16.00	15	195	0
Typ B	E		43.00	5.85	5.40	2	5.00	0.00	5.00	15	195	0
Typ C	D		53.00	5.85	5.40	2	5.00	0.00	5.00	15	195	0
Typ C	D		64.00	5.85	5.40	1	6.00	0.00	0.00	15	195	0
Typ D	C		69.00	5.85	5.40	5	5.00	0.00	20.00	15	195	0
Typ D	C		96.00	5.85	5.40	1	7.00	0.00	0.00	15	195	0
Typ E	B		104.00	5.85	5.40	2	7.00	0.00	7.00	15	195	0
Typ F	A		120.00	5.85	5.40	3	9.00	0.00	18.00	15	195	0
Typ F	A		148.00	5.85	5.40	2	10.00	0.00	10.00	15	195	0
Typ F	A		170.00	5.85	5.40	1	12.00	0.00	0.00	15	195	0



1.5 Risultati dei Calcoli e Parametri di Uniformità

Riepilogo Risultati dei Calcoli

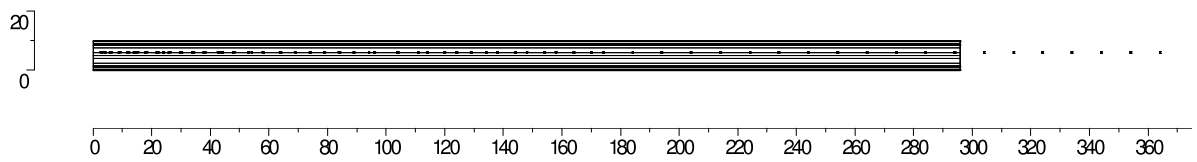
EN 13201:2015						
1 - Gehsteig Richtung Nord	Risultati	EAV = 165.02 lux	EMIN = 22.53 lux			
2 - Fahrbahn	Risultati	LAV = 11.11 cd/m ²	Uo(L) = 0.11	UL = 0.03	fTI = 7 %	REI = 0.16 R=0.22 L=0.16
	Oss. 1) [x=-60.00 y=3.10] m	LAV = 17.33 cd/m ²	Uo(L) = 0.11 *	UL = 0.03 *		
	Oss. 2) [x=356.00 y=6.60] m	LAV = 11.11 cd/m ² *	Uo(L) = 0.17	UL = 0.07		
	Oss.Ti 1) [x=93.14 y=3.10] m				fTI = 3.43 %	
	Oss.Ti 2) [x=84.73 y=6.60] m				fTI = 6.55 % *	
	Lv = 2.14					
3 - Gehsteig Richtung Süd	Risultati	EAV = 118.25 lux	EMIN = 41.21 lux			

Inquinamento Luminoso

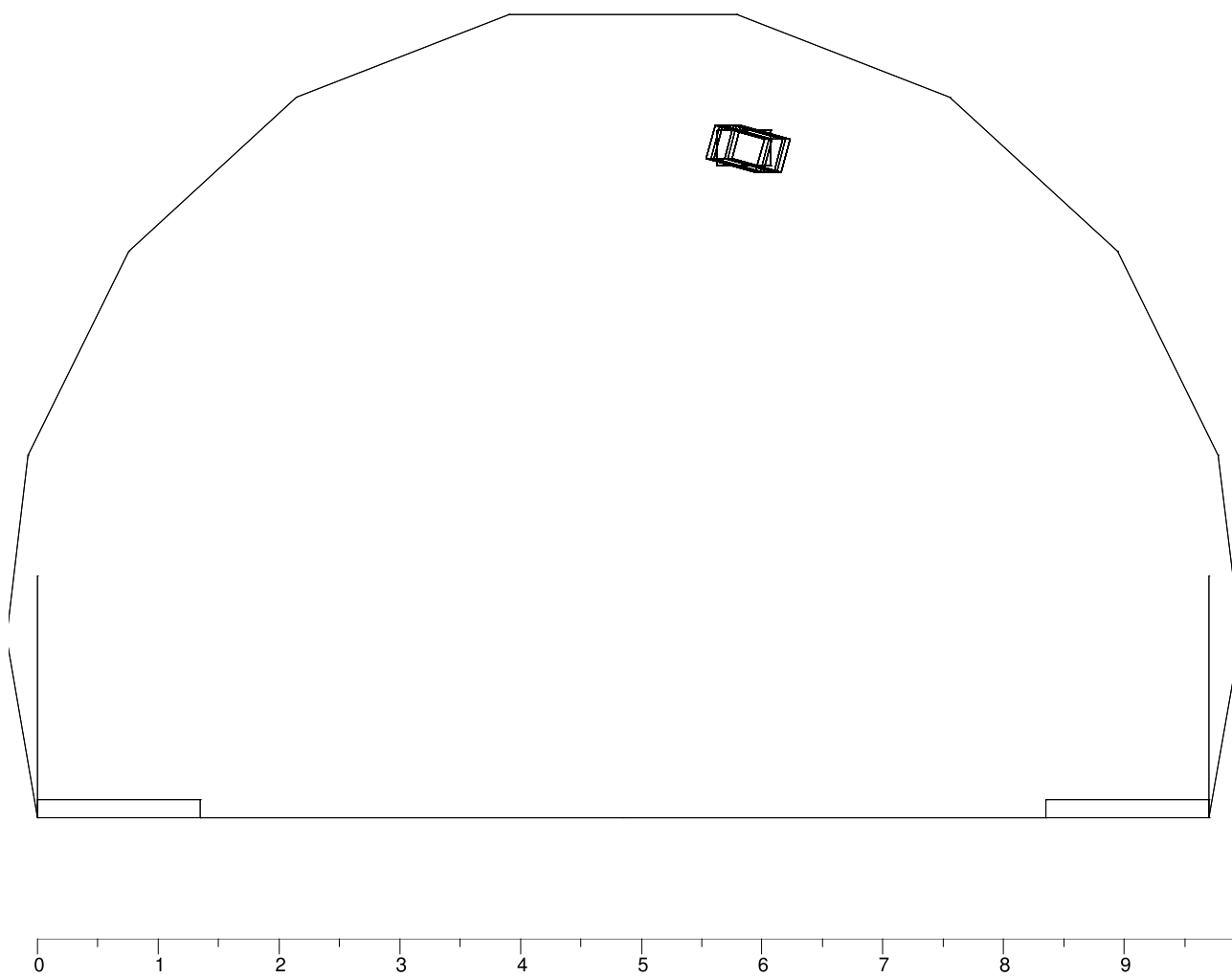
Rapporto Medio - Rn -
0.15 %

2. Viste Ambiente

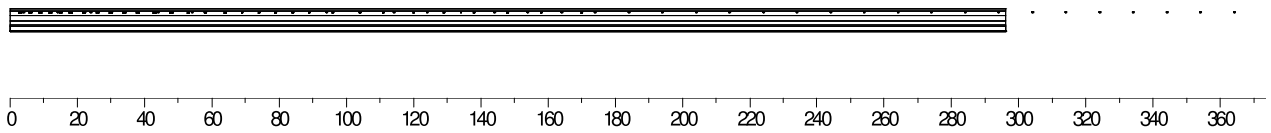
2.1 Vista 2D in Pianta



2.2 Vista Laterale

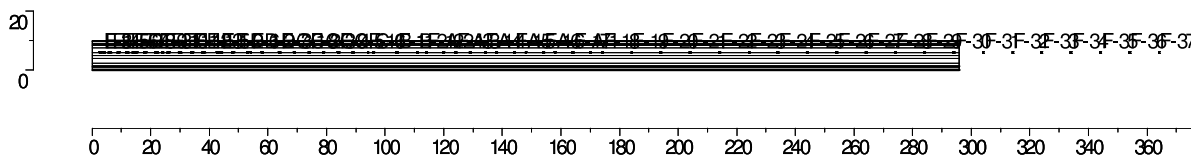


2.3 Vista Frontale



3. Dati Riepilogativi degli Apparecchi

3.1 Vista 2D in Pianta con Apparecchi



3.3 Tabella Riepilogativa Puntamenti

Struttura	Rif.	Codice Apparecchio	Dimmer	Posizione Apparecchi			Rotazione Apparecchi			Puntamenti			R.Asse [°]
				x[m]	y[m]	z[m]	rx[°]	ry[°]	rz[°]	x[m]	y[m]	z[m]	
A-1		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-1	100 %	170.00	5.85	5.40	15.0	-0.0	-165.0	170.37	4.45	0.00	0.0
A-2		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-1	100 %	120.00	5.85	5.40	15.0	-0.0	-165.0	120.37	4.45	0.00	0.0
A-3		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-1	100 %	129.00	5.85	5.40	15.0	-0.0	-165.0	129.37	4.45	0.00	0.0
A-4		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-1	100 %	138.00	5.85	5.40	15.0	-0.0	-165.0	138.37	4.45	0.00	0.0
A-5		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-1	100 %	148.00	5.85	5.40	15.0	-0.0	-165.0	148.37	4.45	0.00	0.0
A-6		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-1	100 %	158.00	5.85	5.40	15.0	-0.0	-165.0	158.37	4.45	0.00	0.0
B-1		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-2	100 %	104.00	5.85	5.40	15.0	-0.0	-165.0	104.37	4.45	0.00	0.0
B-2		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-2	100 %	111.00	5.85	5.40	15.0	-0.0	-165.0	111.37	4.45	0.00	0.0
C-1		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-3	100 %	69.00	5.85	5.40	15.0	-0.0	-165.0	69.37	4.45	0.00	0.0
C-2		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-3	100 %	74.00	5.85	5.40	15.0	-0.0	-165.0	74.37	4.45	0.00	0.0
C-3		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-3	100 %	79.00	5.85	5.40	15.0	-0.0	-165.0	79.37	4.45	0.00	0.0
C-4		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-3	100 %	84.00	5.85	5.40	15.0	-0.0	-165.0	84.37	4.45	0.00	0.0
C-5		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-3	100 %	89.00	5.85	5.40	15.0	-0.0	-165.0	89.37	4.45	0.00	0.0
C-6		Galileo 1 Tunnel EB 0F6 ASC-6W 4.7-3	100 %	96.00	5.85	5.40	15.0	-0.0	-165.0	96.37	4.45	0.00	0.0
D-1		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	53.00	5.85	5.40	15.0	-0.0	-165.0	53.37	4.45	0.00	0.0
D-2		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	58.00	5.85	5.40	15.0	-0.0	-165.0	58.37	4.45	0.00	0.0
D-3		Galileo 2 Tunnel EB 0F6 ASC-6W 4.7-6	100 %	64.00	5.85	5.40	15.0	-0.0	-165.0	64.37	4.45	0.00	0.0
E-1		Galileo 3 Tunnel EB 0F6 ASC-6W 4.7-9	100 %	43.00	5.85	5.40	15.0	-0.0	-165.0	43.37	4.45	0.00	0.0
E-2		Galileo 3 Tunnel EB 0F6 ASC-6W 4.7-9	100 %	48.00	5.85	5.40	15.0	-0.0	-165.0	48.37	4.45	0.00	0.0
E-3		Galileo 3 Tunnel EB 0F6 ASC-6W 4.7-9	100 %	3.00	5.85	5.40	15.0	-0.0	-165.0	3.37	4.45	0.00	0.0
E-4		Galileo 3 Tunnel EB 0F6 ASC-6W 4.7-9	100 %	6.00	5.85	5.40	15.0	-0.0	-165.0	6.37	4.45	0.00	0.0
E-5		Galileo 3 Tunnel EB 0F6 ASC-6W 4.7-9	100 %	9.00	5.85	5.40	15.0	-0.0	-165.0	9.37	4.45	0.00	0.0
E-6		Galileo 3 Tunnel EB 0F6 ASC-6W 4.7-9	100 %	12.00	5.85	5.40	15.0	-0.0	-165.0	12.37	4.45	0.00	0.0
E-7		Galileo 3 Tunnel EB 0F6 ASC-6W 4.7-9	100 %	15.00	5.85	5.40	15.0	-0.0	-165.0	15.37	4.45	0.00	0.0
E-8		Galileo 3 Tunnel EB 0F6 ASC-6W 4.7-9	100 %	18.00	5.85	5.40	15.0	-0.0	-165.0	18.37	4.45	0.00	0.0
E-9		Galileo 3 Tunnel EB 0F6 ASC-6W 4.7-9	100 %	22.00	5.85	5.40	15.0	-0.0	-165.0	22.37	4.45	0.00	0.0
E-10		Galileo 3 Tunnel EB 0F6 ASC-6W 4.7-9	100 %	26.00	5.85	5.40	15.0	-0.0	-165.0	26.37	4.45	0.00	0.0
E-11		Galileo 3 Tunnel EB 0F6 ASC-6W 4.7-9	100 %	30.00	5.85	5.40	15.0	-0.0	-165.0	30.37	4.45	0.00	0.0
E-12		Galileo 3 Tunnel EB 0F6 ASC-6W 4.7-9	100 %	34.00	5.85	5.40	15.0	-0.0	-165.0	34.37	4.45	0.00	0.0
E-13		Galileo 3 Tunnel EB 0F6 ASC-6W 4.7-9	100 %	38.00	5.85	5.40	15.0	-0.0	-165.0	38.37	4.45	0.00	0.0
F-1		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	4.00	5.85	5.40	0.0	-0.0	0.0	4.00	5.85	-0.00	0.0
F-2		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	14.00	5.85	5.40	0.0	-0.0	0.0	14.00	5.85	-0.00	0.0
F-3		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	24.00	5.85	5.40	0.0	-0.0	0.0	24.00	5.85	-0.00	0.0
F-4		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	34.00	5.85	5.40	0.0	-0.0	0.0	34.00	5.85	-0.00	0.0
F-5		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	44.00	5.85	5.40	0.0	-0.0	0.0	44.00	5.85	-0.00	0.0
F-6		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	54.00	5.85	5.40	0.0	-0.0	0.0	54.00	5.85	-0.00	0.0
F-7		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	64.00	5.85	5.40	0.0	-0.0	0.0	64.00	5.85	-0.00	0.0
F-8		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	74.00	5.85	5.40	0.0	-0.0	0.0	74.00	5.85	-0.00	0.0
F-9		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	84.00	5.85	5.40	0.0	-0.0	0.0	84.00	5.85	-0.00	0.0
F-10		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	94.00	5.85	5.40	0.0	-0.0	0.0	94.00	5.85	-0.00	0.0
F-11		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	104.00	5.85	5.40	0.0	-0.0	0.0	104.00	5.85	-0.00	0.0
F-12		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	114.00	5.85	5.40	0.0	-0.0	0.0	114.00	5.85	-0.00	0.0
F-13		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	124.00	5.85	5.40	0.0	-0.0	0.0	124.00	5.85	-0.00	0.0
F-14		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	134.00	5.85	5.40	0.0	-0.0	0.0	134.00	5.85	-0.00	0.0
F-15		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	144.00	5.85	5.40	0.0	-0.0	0.0	144.00	5.85	-0.00	0.0
F-16		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	154.00	5.85	5.40	0.0	-0.0	0.0	154.00	5.85	-0.00	0.0
F-17		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	164.00	5.85	5.40	0.0	-0.0	0.0	164.00	5.85	-0.00	0.0
F-18		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	174.00	5.85	5.40	0.0	-0.0	0.0	174.00	5.85	-0.00	0.0
F-19		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	184.00	5.85	5.40	0.0	-0.0	0.0	184.00	5.85	-0.00	0.0
F-20		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	194.00	5.85	5.40	0.0	-0.0	0.0	194.00	5.85	-0.00	0.0
F-21		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	204.00	5.85	5.40	0.0	-0.0	0.0	204.00	5.85	-0.00	0.0
F-22		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	214.00	5.85	5.40	0.0	-0.0	0.0	214.00	5.85	-0.00	0.0
F-23		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	224.00	5.85	5.40	0.0	-0.0	0.0	224.00	5.85	-0.00	0.0
F-24		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	234.00	5.85	5.40	0.0	-0.0	0.0	234.00	5.85	-0.00	0.0
F-25		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	244.00	5.85	5.40	0.0	-0.0	0.0	244.00	5.85	-0.00	0.0
F-26		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	254.00	5.85	5.40	0.0	-0.0	0.0	254.00	5.85	-0.00	0.0
F-27		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	264.00	5.85	5.40	0.0	-0.0	0.0	264.00	5.85	-0.00	0.0
F-28		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	274.00	5.85	5.40	0.0	-0.0	0.0	274.00	5.85	-0.00	0.0
F-29		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	284.00	5.85	5.40	0.0	-0.0	0.0	284.00	5.85	-0.00	0.0
F-30		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	294.00	5.85	5.40	0.0	-0.0	0.0	294.00	5.85	-0.00	0.0
F-31		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	304.00	5.85	5.40	0.0	-0.0	0.0	304.00	5.85	-0.00	0.0
F-32		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	314.00	5.85	5.40	0.0	-0.0	0.0	314.00	5.85	-0.00	0.0
F-33		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	324.00	5.85	5.40	0.0	-0.0	0.0	324.00	5.85	-0.00	0.0
F-34		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	334.00	5.85	5.40	0.0	-0.0	0.0	334.00	5.85	-0.00	0.0
F-35		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	344.00	5.85	5.40	0.0	-0.0	0.0	344.00	5.85	-0.00	0.0
F-36		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	354.00	5.85	5.40	0.0	-0.0	0.0	354.00	5.85	-0.00	0.0
F-37		Galileo 1 Tunnel 0F8 SS-6W 4.5-1M	100 %	364.00	5.85	5.40	0.0	-0.0	0.0	364.00	5.85	-0.00	0.0

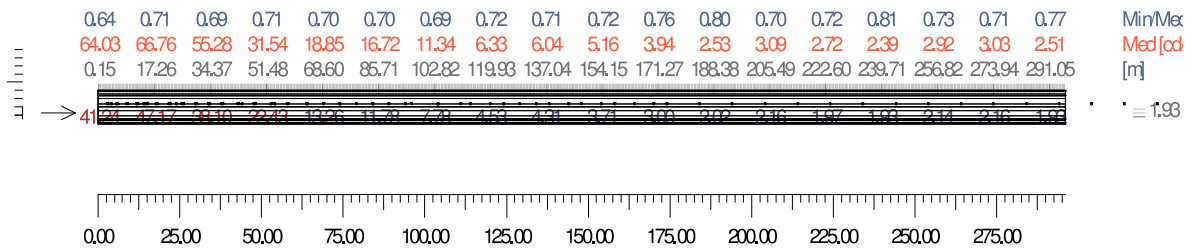
4. Tabelle dei Risultati

4.1 Valori delle Luminanze su: 2-1 (Fahrbahn - Fahrspur Richtung Nord) - Oss. 1 [x=-60.00 y=3.10] m

Risultati	Medio	Minimo	Massimo	Min/Medio	Min/Max	Medio/Max
Luminanza L	16.31 cd/m ²	1.91 cd/m ²	113.94 cd/m ²	0.12 1:8.56	0.02 1:59.81	0.14 1:6.99

Osservatore
Tipo Calcolo

[x=-60.00 y=3.10 z=1.50] m => [x=30.00 y=3.10 z=0.00] m
Solo Dir.



4.2 Curva di Luminanza su: 2-1 (Fahrbahn - Fahrspur Richtung Nord) - Oss. 1 [x=-60.00 y=3.10] m

Risultati	Medio	Minimo	Massimo	Min/Medio	Min/Max	Medio/Max
Luminanza L	16.31 cd/m ²	1.91 cd/m ²	113.94 cd/m ²	0.12 1:8.56	0.02 1:59.81	0.14 1:6.99

Osservatore
 Tipo Calcolo

[x=-60.00 y=3.10 z=1.50] m => [x=30.00 y=3.10 z=0.00] m
 Solo Dir.

