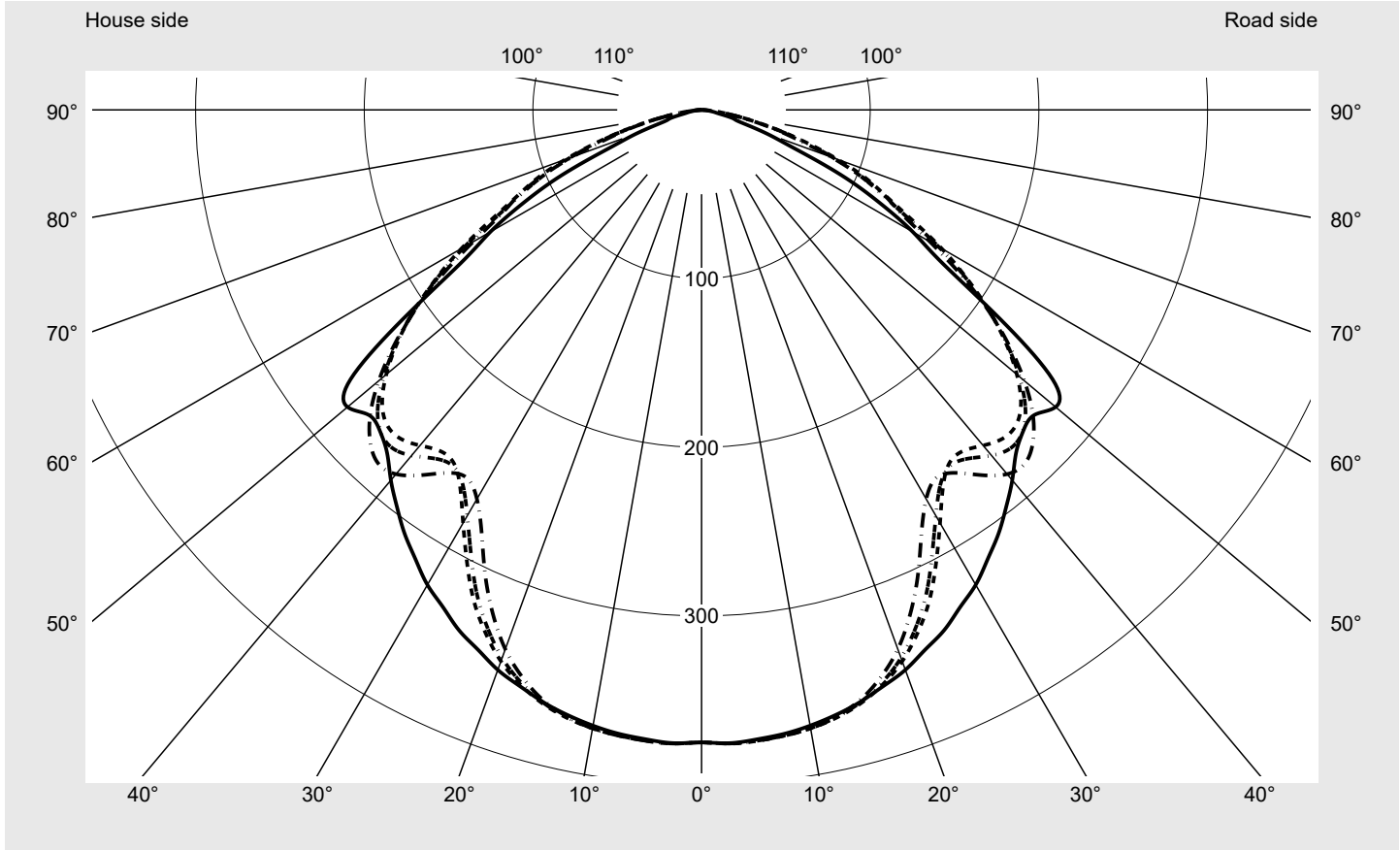


# Photometric test report

<b>Family</b> Tunnellight TL-L	<b>Order number: 5WD7A8P0A2C5</b> <b>EAN: 4069025021281</b>	<b>LP number</b> 59482_192
<b>Version</b>	refurbishment insert for tunnel luminaire, luminaire insert Retrofit	<b>serial</b> <b>documentation</b> 09.04.2024
<b>Optic</b>	symmetric extremely wide distribution	
<b>Cover</b>	enclosure of PMMA	
<b>Lamps</b>	LED 4000 K   CRI ≥ 80	
<b>Controlgear</b>	ECG-DALI	
<b>Rated values</b>	Net luminous flux = 9800 lm Power consumption = 63.4 W Luminous efficacy = 154.6 lm/W	



**Luminous intensity in cd/klm** C180-0 C245-65 C250-70 C270-90 **Imax: 376 cd/klm**



**Luminaire output ratios**

Eta	100.0%
Eta 0° - 90°	100.0%
Eta 90° - 180°	0.0%

**Luminous intensity class acc. to EN13201-2**

Class:	G6
Imax 70°	89.5
Imax 80°	20.7
Imax 90°	0.0
Imax >90°	0.0
Imax >95°	0.0

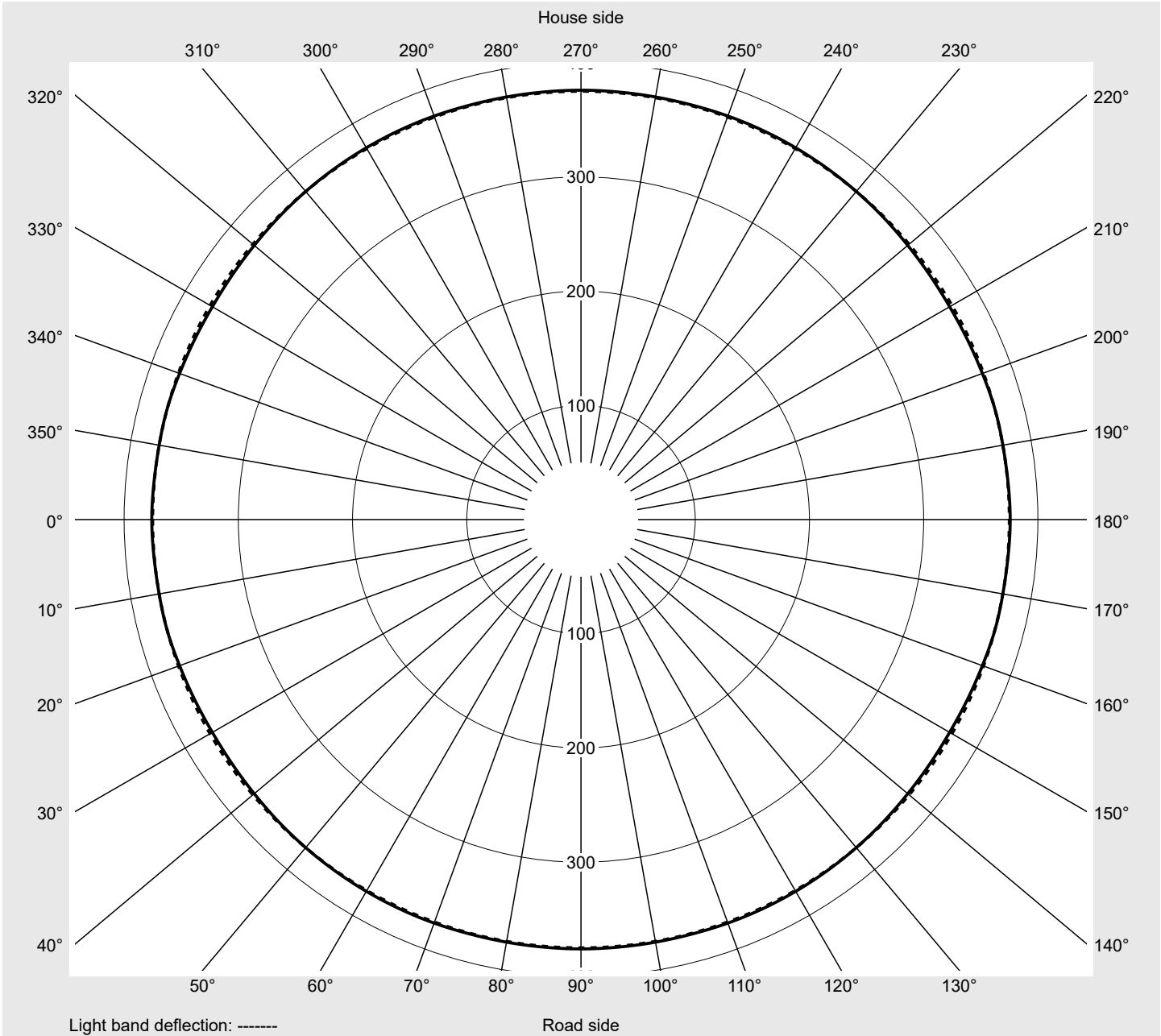
**Measurement conditions**

DIN EN 13032 and DIN 5032

**Photometric test report**

<b>Family</b> Tunnellight TL-L	<b>Order number: 5WD7A8P0A2C5</b> <b>EAN: 4069025021281</b>	<b>LP number</b> 59482_192
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**Envelope curve in cd/klm** KMK 2.5°  KMK 0°  siteco



## Photometric test report

Family <b>Tunnellight TL-L</b>	Order number: <b>5WD7A8P0A2C5</b> EAN: <b>4069025021281</b>	LP number <b>59482_192</b>
<b>Table of values for luminous intensities</b>		<b>Maximum luminous intensity</b>

**siteco**

C-planes	0° 180°	5°	10°	15°	20°	25°	30°	35°	40°	45°
		175° 185° 355°	170° 190° 350°	165° 195° 345°	160° 200° 340°	155° 205° 335°	150° 210° 330°	145° 215° 325°	140° 220° 320°	135° 225° 315°
Luminous intensity in cd/klm										
γ										
0,0°	375.0	375.0	375.0	375.0	375.0	375.0	375.0	375.0	375.0	375.0
2,5°	375.8	375.3	375.0	375.1	374.0	373.2	372.7	372.9	373.4	374.3
5,0°	374.6	374.3	374.2	374.3	373.2	372.4	371.9	372.2	372.8	373.6
7,5°	373.1	373.0	373.0	373.1	372.0	371.2	370.7	371.0	371.5	372.4
10,0°	370.7	370.9	371.1	371.3	370.3	369.5	368.9	369.2	369.8	370.6
12,5°	367.4	367.9	368.2	368.4	367.5	366.8	366.2	366.5	367.1	367.9
15,0°	363.4	364.1	364.6	364.8	364.0	363.3	362.7	362.9	363.5	364.3
17,5°	358.2	359.5	360.2	360.4	359.7	359.0	358.2	358.3	358.6	359.0
20,0°	353.3	354.3	355.1	355.6	354.8	354.0	353.3	353.0	352.8	352.6
22,5°	346.4	348.4	349.5	349.8	349.1	348.1	347.0	346.1	345.2	344.2
25,0°	340.4	342.0	343.1	343.6	342.7	341.4	339.7	337.9	335.9	333.8
27,5°	332.2	334.7	336.1	336.2	335.0	333.2	330.7	327.6	324.3	320.7
30,0°	325.1	327.2	328.4	328.4	326.8	324.3	320.8	316.3	311.4	306.1
32,5°	315.8	318.6	319.9	319.6	317.4	313.9	309.2	303.2	296.5	289.1
35,0°	306.9	309.2	310.1	309.5	306.4	301.8	295.6	287.6	279.1	270.1
37,5°	296.7	299.3	299.9	298.5	294.4	288.6	281.2	271.3	261.6	252.2
40,0°	286.6	288.7	288.7	286.6	281.1	273.8	264.6	253.3	243.9	236.5
42,5°	276.0	278.8	278.4	274.6	267.5	258.4	247.5	236.0	228.9	226.3
45,0°	269.6	271.0	268.8	263.1	253.8	242.6	229.6	220.3	217.7	221.9
47,5°	267.7	268.7	264.7	255.7	242.9	229.1	214.3	209.2	211.5	221.1
50,0°	274.0	274.7	268.5	255.4	236.9	219.6	203.3	203.3	208.7	219.7
52,5°	262.3	264.7	261.3	251.9	233.3	216.3	201.1	203.5	208.1	214.9
55,0°	216.1	216.5	215.4	212.7	205.8	203.6	205.9	208.7	209.2	207.5
57,5°	169.7	171.3	169.4	164.0	162.7	170.6	187.8	203.8	208.0	200.2
60,0°	144.6	144.2	140.7	134.0	132.9	139.8	154.8	173.9	186.6	192.7
62,5°	118.5	119.6	117.3	111.8	112.8	118.6	129.4	139.1	150.0	162.1
65,0°	91.1	90.1	88.7	87.0	91.8	99.3	109.8	115.5	120.4	124.2
67,5°	59.4	60.9	61.1	60.1	65.2	73.0	83.3	91.9	96.6	97.5
70,0°	41.2	40.7	40.7	41.1	44.7	50.1	57.1	64.8	71.4	76.8
72,5°	24.0	24.8	25.3	25.5	28.3	32.4	37.8	44.0	49.5	54.2
75,0°	19.1	19.3	19.5	19.8	20.8	22.2	24.0	29.0	33.7	38.1
77,5°	11.3	11.9	12.4	12.9	14.3	15.7	17.0	20.3	23.0	25.4
80,0°	7.9	7.8	7.8	7.9	8.3	8.9	9.7	11.6	14.1	17.2
82,5°	4.9	4.9	4.9	4.9	5.1	5.5	5.9	6.9	8.1	9.6
85,0°	2.8	2.7	2.7	2.8	2.8	2.9	3.1	3.4	3.9	4.6
87,5°	1.0	1.0	1.0	1.0	1.0	1.1	1.1	1.2	1.4	1.6
90,0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

## Photometric test report

Family <b>Tunnellight TL-L</b>	Order number: <b>5WD7A8P0A2C5</b> EAN: <b>4069025021281</b>	LP number <b>59482_192</b>
<b>Table of values for luminous intensities</b>		<b>Maximum luminous intensity</b>
		<b>siteco</b>

C-planes $\gamma$	50°	55°	60°	65°	70°	75°	80°	85°	90°	Phi-zone	Total Phi-zone
	130° 230° 310°	125° 235° 305°	120° 240° 300°	115° 245° 295°	110° 250° 290°	105° 255° 285°	100° 260° 280°	95° 265° 275°			
Luminous intensity in cd/klm										Luminous flux in lm/klm	
0,0°	375.0	375.0	375.0	375.0	375.0	375.0	375.0	375.0	375.0	0.6	0.6
2,5°	375.0	375.5	375.9	376.0	376.0	375.7	375.7	375.8	375.9	4.5	5.0
5,0°	374.3	374.9	375.3	375.5	375.5	375.2	375.2	375.3	375.5	8.9	14.0
7,5°	373.1	373.6	374.1	374.2	374.2	374.0	374.0	374.1	374.2	13.3	27.3
10,0°	371.3	371.9	372.3	372.3	372.2	372.0	372.0	372.1	372.2	17.7	45.0
12,5°	368.5	369.0	369.3	369.1	368.9	368.4	368.3	368.3	368.4	21.8	66.8
15,0°	364.6	364.8	364.9	364.3	363.6	362.9	362.6	362.4	362.4	25.8	92.6
17,5°	359.0	358.8	358.4	357.2	355.9	354.6	353.7	353.1	352.9	29.5	122.1
20,0°	352.0	351.0	349.9	347.8	345.7	343.5	341.9	340.8	340.2	32.8	155.0
22,5°	342.4	340.5	338.2	335.2	332.0	328.7	326.1	324.3	323.4	35.7	190.7
25,0°	330.8	327.7	324.2	320.1	315.7	311.2	307.6	305.1	303.7	38.1	228.8
27,5°	316.3	311.6	306.7	301.4	296.2	291.0	286.9	284.1	282.4	39.9	268.8
30,0°	300.0	293.9	288.0	282.8	277.9	273.3	269.9	267.6	266.4	41.4	310.2
32,5°	281.8	275.3	269.6	266.2	263.5	261.5	260.2	259.3	258.8	42.7	352.8
35,0°	263.2	258.2	255.1	255.9	257.4	259.6	261.2	262.2	262.7	43.9	396.7
37,5°	248.0	247.0	249.1	254.9	260.5	265.9	269.6	271.9	272.9	45.4	442.2
40,0°	238.2	242.9	250.7	259.7	267.5	274.0	278.0	280.7	281.9	46.9	489.1
42,5°	234.5	244.1	255.2	264.3	271.7	277.4	280.9	283.1	284.0	48.2	537.3
45,0°	234.4	246.0	256.9	263.9	269.3	273.2	275.8	277.3	277.9	49.1	586.4
47,5°	233.6	244.0	252.3	256.9	260.3	262.8	264.8	265.9	266.3	49.7	636.1
50,0°	229.0	236.3	241.5	244.0	245.9	247.2	248.7	249.6	249.8	50.1	686.2
52,5°	219.7	223.6	226.4	227.7	228.5	228.8	229.7	230.2	230.2	49.7	735.9
55,0°	207.5	207.8	208.6	208.5	208.4	208.1	208.4	208.3	207.9	46.9	782.9
57,5°	193.7	189.6	188.0	187.0	186.0	185.2	184.7	183.9	182.8	42.5	825.4
60,0°	180.4	171.8	166.8	164.4	162.2	160.3	159.2	157.9	156.4	37.9	863.3
62,5°	160.1	154.2	144.4	140.0	136.9	135.2	135.0	134.6	134.0	32.8	896.1
65,0°	131.8	132.2	125.5	120.3	117.7	117.6	118.7	119.4	119.6	27.8	923.9
67,5°	102.8	107.4	111.4	104.9	101.3	100.6	101.2	101.7	101.9	22.5	946.4
70,0°	80.8	85.1	89.5	85.9	83.2	81.4	81.6	81.7	81.7	17.4	963.9
72,5°	60.0	63.5	64.8	66.4	65.4	61.8	61.8	61.8	61.7	12.6	976.5
75,0°	41.4	44.7	48.1	48.6	48.1	46.6	46.4	46.4	46.4	9.3	985.8
77,5°	27.7	29.8	31.8	33.0	33.5	33.1	32.4	32.0	32.0	6.4	992.1
80,0°	18.0	18.9	19.8	20.4	20.7	20.7	20.3	20.1	20.1	4.0	996.1
82,5°	10.0	10.8	11.8	11.9	11.9	11.8	11.5	11.4	11.3	2.3	998.5
85,0°	4.7	5.0	5.3	5.5	5.6	5.4	5.3	5.2	5.1	1.1	999.6
87,5°	1.6	1.7	1.8	1.8	1.8	1.8	1.7	1.7	1.7	0.4	1000.0
90,0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0

## Photometric test report

Family <b>Tunnellight TL-L</b>	Order number: <b>5WD7A8P0A2C5</b> EAN: <b>4069025021281</b>	LP number <b>59482_192</b>
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<b>Dimming levels table</b>	environmental temperature: 25°C	<b>siteco</b>
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Luminous flux %	Dimming level linear	Dimming level logarithmic	Luminous flux [lm]	Power consumption [W]
100	254	254	9800	63.4
95	240	252	9301	59.9
90	227	250	8828	56.6
85	213	248	8320	53.2
80	200	245	7840	50.1
75	187	243	7359	46.9
70	174	240	6871	43.8
65	161	237	6382	40.7
60	148	234	5889	37.6
55	135	231	5391	34.5
50	122	227	4890	31.4
45	110	223	4423	28.5
40	97	219	3915	25.6
35	85	214	3441	22.8
30	72	208	2927	19.7
25	60	201	2446	16.9
20	48	193	1964	14.2
15	36	182	1477	11.4
13	31	177	1275	10.2

<b>Dimming levels table</b>	environmental temperature: 10°C
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Luminous flux %	Dimming level linear	Dimming level logarithmic	Luminous flux [lm]	Power consumption [W]
100	254	254	9930	63.5
95	240	252	9422	60.0
90	227	250	8941	56.7
85	213	248	8424	53.3
80	200	245	7937	50.2
75	187	243	7448	47.0
70	174	240	6953	43.9
65	161	237	6457	40.7
60	148	234	5958	37.7
55	135	231	5453	34.6
50	122	227	4946	31.5
45	110	223	4473	28.6
40	97	219	3959	25.6
35	85	214	3479	22.8
30	73	208	2999	20.0
25	60	201	2472	17.0
20	48	193	1985	14.2
15	36	182	1493	11.4
13	31	177	1289	10.2

**Photometric test report**

<b>Family</b> Tunnellight TL-L	<b>Order number: 5WD7A8P0A2C5</b> <b>EAN: 4069025021281</b>	<b>LP number</b> <b>59482_192</b>
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**Luminousfluxs table** **siteco**

Temperature °C	Luminous flux lm	Power consumption W
25.0	9800.0	63.4
10.0	9930.0	63.5