
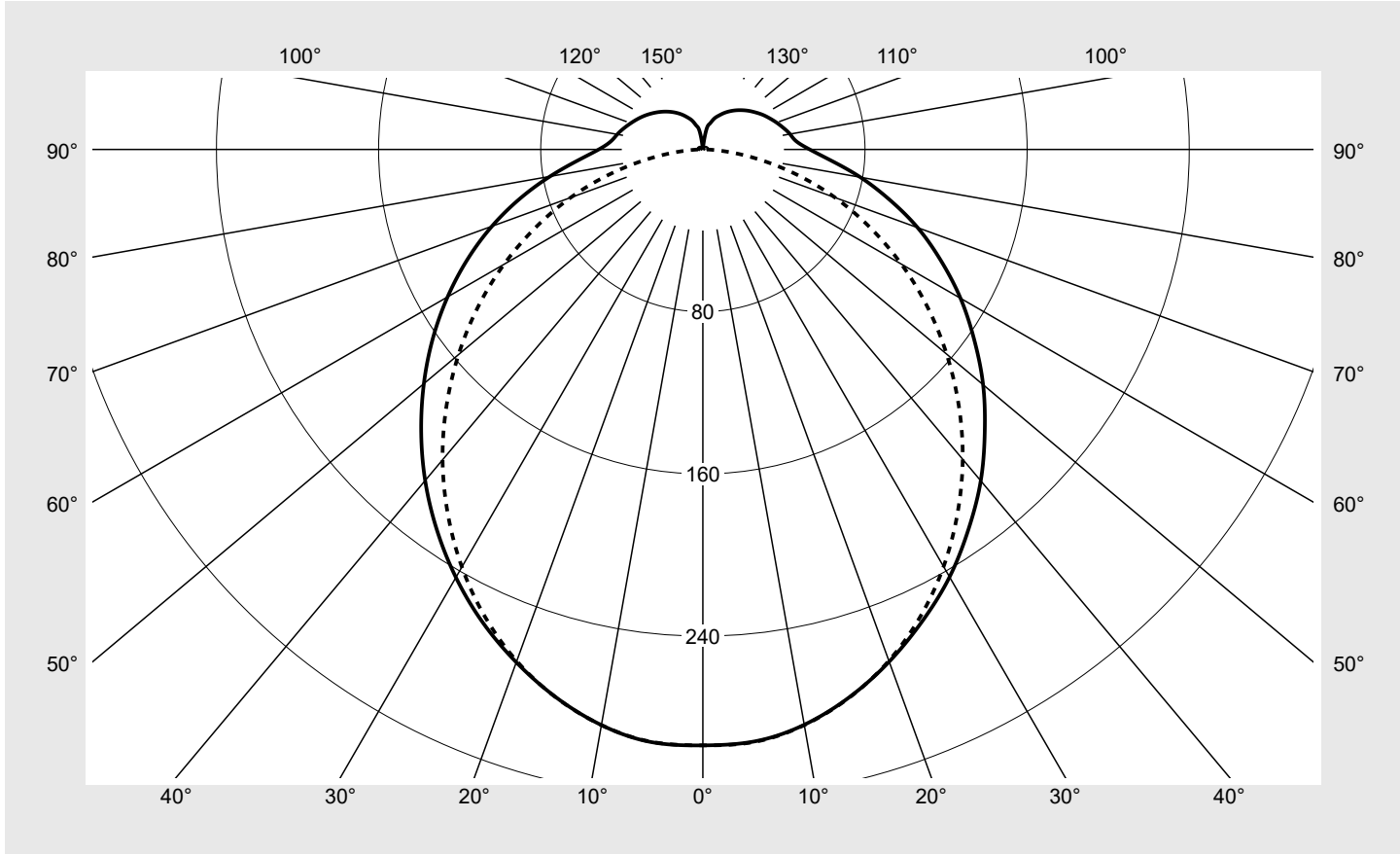


# Photometric test report

<b>Family</b> <b>Licross® 21 Opal</b>	<b>Order number: 52TL1DDN425G</b> <b>EAN: 4069025021724</b>	<b>LP number</b> <b>59520_86</b>
	<b>Version</b> cover, opal, direct-/ indirect distribution, diffuse <b>Lamps</b> LED 4000 K   CRI ≥ 80 <b>Controlgear</b> ECG-DALI <b>Rated values</b> Net luminous flux = 2750 lm Power consumption = 16.2 W Luminous efficacy = 169.8 lm/W	<b>serial documentation</b> <b>21.02.2024</b>



**Luminous intensity in cd/klm** C180-0 C270-90 **Imax: 294 cd/klm**



Classifications	
DIN 5040	B 3 1
CIE	N1=44 N2=73 N3=91 N4=87 N5=100

Luminaire light output ratios	
$\eta_{LB}$	100.0%
$\phi_u$	87.4%
$\phi_o$	12.6%

Measurement conditions
DIN EN 13032 and DIN 5032

## Photometric test report

<b>Family</b> <b>Licross® 21 Opal</b>	<b>Order number: 52TL1DDN425G</b> <b>EAN: 4069025021724</b>	<b>LP number</b> <b>59520_86</b>
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<b>Table of values for luminous intensities</b>	<b>Maximum luminous intensity</b>	<b>siteco</b>
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C-planes	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°	165°	180°
$\gamma$	Luminous intensity in cd/klm												
0°	293.9	293.9	293.9	293.9	293.9	293.9	293.9	293.9	293.9	293.9	293.9	293.9	293.9
5°	293.1	292.7	289.9	291.0	293.1	293.0	293.3	293.1	293.1	292.5	291.2	291.6	293.4
10°	288.1	287.8	285.0	286.0	288.1	287.9	288.3	288.0	288.0	287.5	286.2	286.7	288.3
15°	279.6	279.4	276.6	277.6	279.6	279.4	279.8	279.5	279.5	279.0	277.7	278.4	279.8
20°	268.8	268.4	265.5	266.2	268.1	267.8	268.3	268.1	268.0	267.5	266.6	267.8	269.2
25°	256.5	256.4	252.9	252.4	253.9	253.4	254.1	253.8	253.8	253.6	254.0	255.9	257.2
30°	243.5	242.9	239.1	237.4	237.4	236.9	237.6	237.4	237.5	238.5	240.0	242.5	243.7
35°	228.6	228.2	223.9	221.1	219.2	218.5	219.1	218.9	219.7	221.9	224.6	227.5	228.9
40°	213.3	212.5	208.1	204.0	200.4	198.8	199.5	199.5	201.1	204.3	208.6	211.7	213.2
45°	196.7	195.9	191.2	185.9	180.8	177.8	178.6	178.3	181.6	186.0	191.4	194.8	196.6
50°	180.5	179.0	174.4	167.8	161.5	156.5	157.0	156.9	161.7	167.6	173.9	177.7	179.7
55°	163.4	162.0	157.2	149.2	141.7	135.1	135.2	135.5	141.8	149.1	156.1	160.5	162.7
60°	146.8	144.8	139.8	131.0	122.1	114.1	113.1	114.2	121.9	130.6	138.3	143.3	145.4
65°	129.6	127.7	122.3	112.9	103.0	93.4	91.0	93.7	102.6	112.1	120.5	126.2	128.1
70°	112.8	110.6	104.4	95.0	83.9	73.2	69.4	73.2	83.4	93.6	102.3	109.1	110.8
75°	95.2	93.5	86.3	76.8	64.8	53.0	48.0	53.1	64.1	74.9	84.3	91.4	93.3
80°	78.9	76.8	69.4	59.0	47.0	34.5	28.0	34.2	45.8	57.3	67.7	74.1	76.6
85°	63.7	61.7	54.7	44.0	31.4	18.8	11.3	18.6	30.6	42.7	52.6	59.2	61.9
90°	52.7	50.3	47.2	33.6	21.8	9.7	1.7	9.7	21.3	32.8	42.6	49.1	51.4
95°	46.3	44.0	38.4	29.9	19.4	8.9	1.8	8.9	19.3	29.6	38.3	43.8	45.6
100°	43.6	41.6	36.5	28.4	19.0	9.0	2.1	8.7	18.6	27.9	35.8	41.3	42.9
105°	41.1	39.4	34.3	27.0	18.2	9.1	2.1	8.8	17.9	26.7	33.7	38.6	40.4
110°	38.7	36.7	32.3	25.7	17.6	9.2	2.0	8.7	17.0	25.1	31.7	36.0	37.9
115°	36.4	34.4	30.4	24.3	17.0	9.3	1.9	8.8	16.4	23.6	29.8	33.7	35.5
120°	34.1	32.2	28.7	23.1	16.5	9.4	1.8	8.8	15.7	22.3	27.9	31.4	33.2
125°	31.8	30.1	26.8	21.8	15.8	9.4	1.6	8.8	15.0	21.0	26.0	29.2	30.9
130°	29.6	27.9	25.1	20.7	15.3	9.5	1.4	8.7	14.3	19.7	24.1	27.1	28.6
135°	27.4	25.8	23.3	19.5	14.6	8.1	1.3	7.6	13.7	18.5	22.3	24.9	26.4
140°	25.2	23.7	21.6	18.3	13.6	7.0	1.3	6.4	12.7	17.1	20.5	22.8	24.2
145°	23.0	21.6	19.8	16.6	12.1	6.4	1.2	5.9	11.1	15.6	18.8	20.7	21.9
150°	20.7	19.6	18.1	14.3	11.0	6.2	1.3	6.0	9.5	13.3	16.9	18.6	19.6
155°	18.4	17.4	15.6	12.5	8.2	5.5	1.3	5.2	7.5	11.1	14.5	16.4	17.3
160°	16.1	15.3	12.6	10.0	7.9	5.1	1.4	4.6	6.8	7.9	11.7	14.3	14.9
165°	13.1	12.1	8.6	7.8	8.1	5.4	1.4	4.8	6.9	7.0	6.9	11.2	12.1
170°	9.8	7.7	7.3	8.0	6.5	2.9	1.4	2.2	5.4	6.7	6.3	6.6	8.9
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

## Photometric test report

<b>Family</b> <b>Licross® 21 Opal</b>	<b>Order number: 52TL1DDN425G</b> <b>EAN: 4069025021724</b>	<b>LP number</b> <b>59520_86</b>
<b>Table of values for luminous intensities</b>		<b>Maximum luminous intensity</b>
		<b>siteco</b>

C-planes	195°	210°	225°	240°	255°	270°	285°	300°	315°	330°	345°	Phi-zone	Total Phi-zone
$\gamma$	Luminous intensity in cd/klm											Luminous flux in lm/klm	
0°	293.9	293.9	293.9	293.9	293.9	293.9	293.9	293.9	293.9	293.9	293.9	1.8	1.8
5°	292.9	289.8	290.9	292.8	292.8	293.2	292.8	292.9	292.3	291.2	292.0	14.0	15.7
10°	288.0	285.0	285.8	287.9	287.8	288.3	287.9	288.0	287.3	286.3	287.0	27.3	43.1
15°	279.5	276.7	277.5	279.4	279.4	279.9	279.5	279.5	278.9	277.9	279.0	39.6	82.6
20°	268.9	265.7	266.2	268.0	267.9	268.5	268.2	268.1	267.5	266.6	267.7	50.2	132.8
25°	256.9	253.4	252.5	253.8	253.6	254.3	254.0	254.0	253.5	253.8	256.1	58.9	191.7
30°	243.4	239.6	237.7	237.4	237.1	237.8	237.6	237.8	238.3	239.7	242.3	65.6	257.3
35°	228.5	224.4	221.4	219.4	218.7	219.4	219.3	219.8	221.8	224.6	228.0	70.0	327.3
40°	212.7	208.2	204.2	200.7	198.9	199.8	199.8	201.1	204.3	208.6	211.9	72.3	399.6
45°	195.8	191.1	185.9	181.0	177.8	178.9	178.7	181.7	186.2	191.6	195.6	72.3	472.0
50°	178.6	174.0	167.6	161.4	156.5	157.3	157.3	162.0	168.0	174.3	178.3	70.5	542.5
55°	161.2	156.5	148.8	141.5	135.3	135.5	135.8	142.2	149.7	156.9	161.8	66.9	609.4
60°	143.7	138.7	130.1	121.6	114.2	113.3	114.6	122.5	131.3	139.3	144.4	61.7	671.1
65°	126.5	121.0	111.8	102.3	93.3	91.1	94.0	103.2	113.1	121.8	128.0	55.2	726.3
70°	109.1	102.8	93.5	83.0	72.9	69.4	73.6	84.1	94.6	103.5	110.4	47.6	773.9
75°	91.6	84.7	75.4	63.7	52.5	47.9	53.5	65.0	76.2	85.9	93.4	39.0	812.9
80°	74.9	67.7	57.5	45.8	33.9	27.9	34.5	46.6	58.5	69.1	75.6	30.2	843.1
85°	59.9	53.1	42.6	30.4	18.3	11.1	18.9	31.3	43.7	53.8	61.1	22.2	865.3
90°	49.1	42.6	32.8	21.3	9.6	1.7	9.7	21.6	33.2	43.3	50.0	16.9	882.1
95°	43.4	38.0	29.6	19.2	8.8	1.8	8.9	19.4	29.7	38.6	44.5	14.9	897.1
100°	41.0	35.9	27.9	18.7	8.8	2.1	8.9	18.7	28.1	36.1	41.8	14.0	911.1
105°	38.7	33.7	26.5	17.8	8.7	2.1	9.0	18.1	27.0	34.2	39.3	13.1	924.2
110°	35.9	31.6	25.0	17.1	8.8	2.0	9.1	17.4	25.5	32.1	36.6	12.0	936.2
115°	33.6	29.7	23.6	16.4	8.7	1.9	9.3	16.9	24.2	30.4	34.4	11.0	947.2
120°	31.4	27.9	22.4	15.7	8.8	1.8	9.3	16.2	22.9	28.6	32.2	9.9	957.1
125°	29.2	26.0	21.1	15.0	8.7	1.6	9.4	15.7	21.7	26.8	30.1	8.9	966.0
130°	27.0	24.2	19.8	14.4	8.7	1.4	9.4	15.1	20.5	24.9	27.8	7.8	973.7
135°	24.9	22.4	18.6	13.7	7.3	1.3	8.2	14.6	19.3	23.2	25.8	6.7	980.4
140°	22.7	20.6	17.3	12.7	6.4	1.3	7.0	13.5	18.0	21.5	23.6	5.6	986.0
145°	20.6	18.9	15.7	11.3	5.8	1.2	6.5	12.0	15.8	19.8	21.6	4.5	990.5
150°	18.5	17.0	13.4	10.2	6.1	1.3	6.3	10.3	14.2	17.9	19.5	3.5	994.0
155°	16.4	14.6	11.8	7.5	4.9	1.3	5.8	8.1	12.0	15.5	17.4	2.6	996.6
160°	14.2	11.8	9.1	7.1	4.6	1.4	5.2	7.3	8.7	12.7	15.3	1.8	998.3
165°	11.1	8.0	7.1	7.6	4.8	1.4	5.5	7.3	7.6	7.6	12.0	1.1	999.4
170°	6.9	7.3	7.0	5.8	2.1	1.4	3.1	6.1	7.5	6.2	7.2	0.6	1000.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
180°	0.0	0.0	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

<b>Family</b> Licross® 21 Opal	<b>Order number: 52TL1DDN425G</b> <b>EAN: 4069025021724</b>	<b>LP number</b> 59520_86
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<b>UGR-Table</b>	<b>Standard room</b>	<b>siteco</b>
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Reflection factor of ceiling	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3	
Reflection factor of walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3	
Reflection factor of floor	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	
Room dimensions	View crosswise (C0)					View endwise (C90)					
x	y										
2H	2H	17.3	18.8	17.7	19.3	19.8	16.9	18.5	17.4	18.9	19.4
	3H	19.2	20.6	19.7	21.1	21.6	18.5	19.9	19.0	20.4	20.9
	4H	20.0	21.3	20.5	21.8	22.4	19.0	20.3	19.5	20.8	21.4
	6H	20.8	22.0	21.3	22.5	23.1	19.4	20.6	19.9	21.1	21.7
	8H	21.2	22.3	21.7	22.9	23.5	19.5	20.7	20.1	21.2	21.8
	12H	21.5	22.5	22.1	23.1	23.8	19.5	20.6	20.1	21.2	21.8
4H	2H	18.0	19.3	18.5	19.8	20.3	17.6	18.9	18.2	19.5	20.0
	3H	20.0	21.1	20.6	21.7	22.3	19.3	20.4	19.9	21.0	21.6
	4H	21.0	22.0	21.6	22.6	23.3	20.0	21.0	20.6	21.6	22.3
	6H	21.9	22.8	22.6	23.4	24.1	20.5	21.4	21.1	22.0	22.7
	8H	22.4	23.2	23.0	23.9	24.6	20.7	21.5	21.3	22.1	22.8
	12H	22.8	23.5	23.5	24.2	24.9	20.7	21.5	21.4	22.1	22.8
8H	4H	21.3	22.2	21.9	22.8	23.4	20.4	21.2	21.0	21.9	22.5
	6H	22.5	23.2	23.1	23.8	24.5	21.1	21.8	21.7	22.4	23.2
	8H	23.1	23.7	23.7	24.3	25.1	21.4	22.0	22.0	22.6	23.4
	12H	23.6	24.1	24.3	24.8	25.6	21.5	22.0	22.2	22.7	23.5
12H	4H	21.3	22.0	21.9	22.7	23.4	20.5	21.2	21.1	21.8	22.5
	6H	22.5	23.1	23.2	23.8	24.5	21.2	21.8	21.9	22.5	23.2
	8H	23.1	23.7	23.8	24.3	25.1	21.5	22.1	22.2	22.7	23.5

<b>Luminance table</b>	<b>Max. for <math>\gamma \geq 65^\circ</math></b>	<b>Photometric dimensions in mm:</b>	<b>L = 1500</b>	<b>H(C0) = 25</b>	<b>H(C180) = 25</b>
			<b>B = 76</b>	<b>H(C90) = 25</b>	<b>H(C270) = 25</b>

C-planes	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°	330°
$\gamma$	Luminance in cd/m <sup>2</sup>											
45°	5050.0	5044.2	5233.1	5992.1	5254.2	5048.5	5045.8	5042.1	5237.8	6003.0	5256.6	5054.9
50°	4866.7	4849.0	4995.0	5778.0	5002.5	4835.5	4844.9	4837.8	4992.5	5789.9	5010.0	4846.8
55°	4676.2	4659.5	4746.9	5555.0	4749.6	4628.3	4655.3	4637.9	4741.5	5564.9	4763.2	4652.3
60°	4512.2	4471.9	4497.2	5303.8	4491.3	4425.2	4469.9	4438.2	4479.3	5311.4	4512.2	4456.3
65°	4336.1	4284.6	4248.1	5014.3	4231.4	4222.1	4287.3	4242.0	4218.0	5018.8	4258.1	4267.6
70°	4178.3	4076.4	3969.2	4682.9	3942.4	3994.1	4103.3	4016.3	3923.2	4682.9	3976.9	4044.8
75°	3983.1	3840.2	3623.9	4210.9	3581.8	3753.6	3905.2	3768.1	3561.8	4204.5	3631.6	3822.2
80°	3825.7	3622.4	3240.9	3548.8	3161.0	3533.6	3711.8	3529.4	3157.7	3535.4	3215.2	3605.5
85°	3701.6	3476.6	2852.4	2620.1	2781.7	3345.2	3597.6	3375.1	2758.9	2590.2	2845.0	3424.5

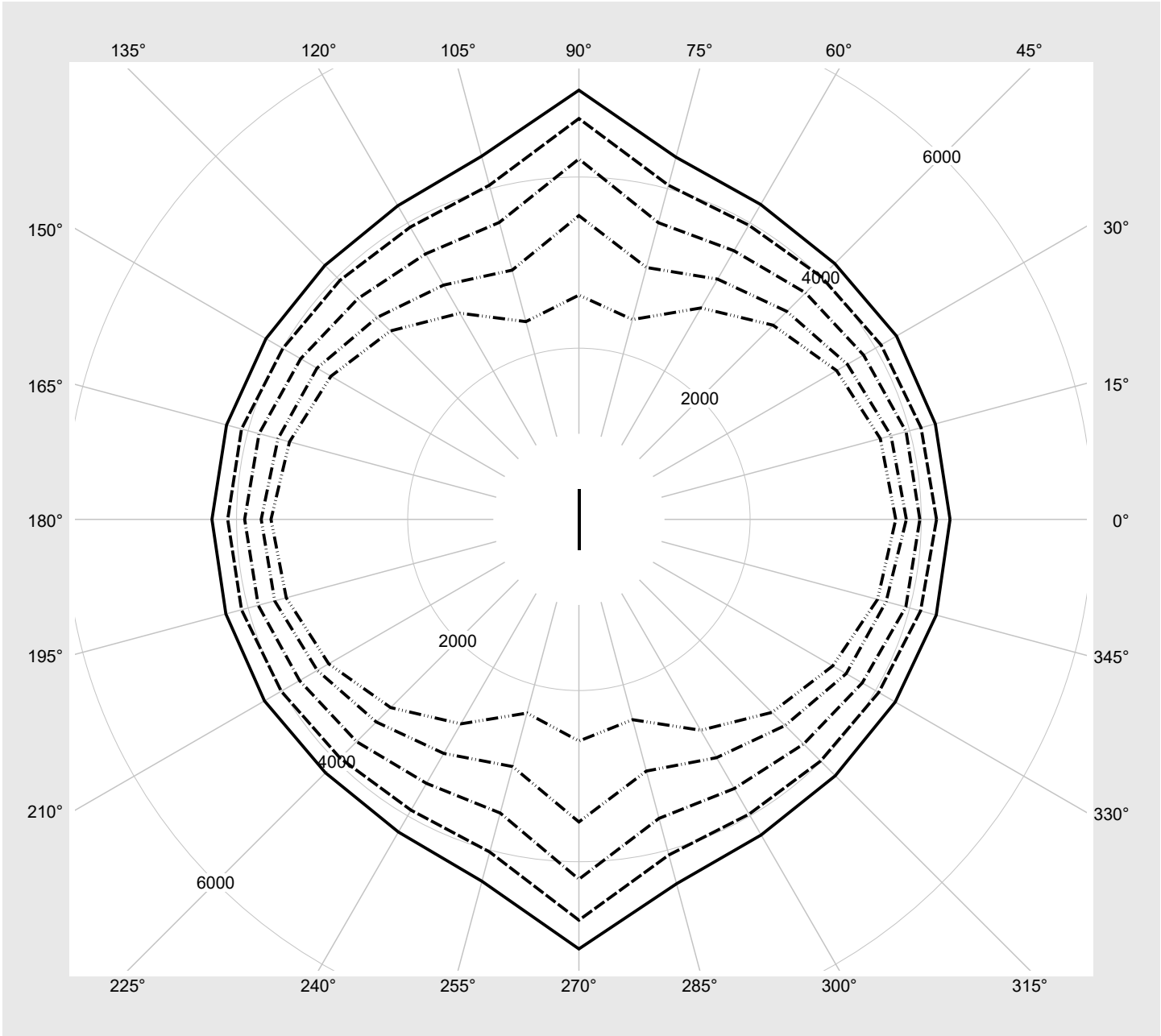
**Photometric test report**

<b>Family</b> <b>Licross® 21 Opal</b>	<b>Order number: 52TL1DDN425G</b> <b>EAN: 4069025021724</b>	<b>LP number</b> <b>59520_86</b>
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**Luminance values in cd/m<sup>2</sup>**

$\gamma$  65°   
   $\gamma$  70°   
   $\gamma$  75°   
   $\gamma$  80°   
   $\gamma$  85°

**siteco**



## Photometric test report

Family <b>Licross® 21 Opal</b>	Order number: <b>52TL1DDN425G</b> EAN: <b>4069025021724</b>	LP number <b>59520_86</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	2750	16.2
95	241	252	2612	15.5
90	228	250	2473	14.7
85	216	248	2342	14.0
80	203	246	2203	13.1
75	190	243	2064	12.3
70	177	241	1924	11.7
65	165	238	1793	11.4
60	152	235	1652	10.7
55	139	232	1512	10.0
50	126	228	1371	9.3
45	114	225	1237	8.6
40	101	220	1096	7.8
35	89	216	965	7.1
30	76	210	824	6.4
29	73	208	791	6.2