

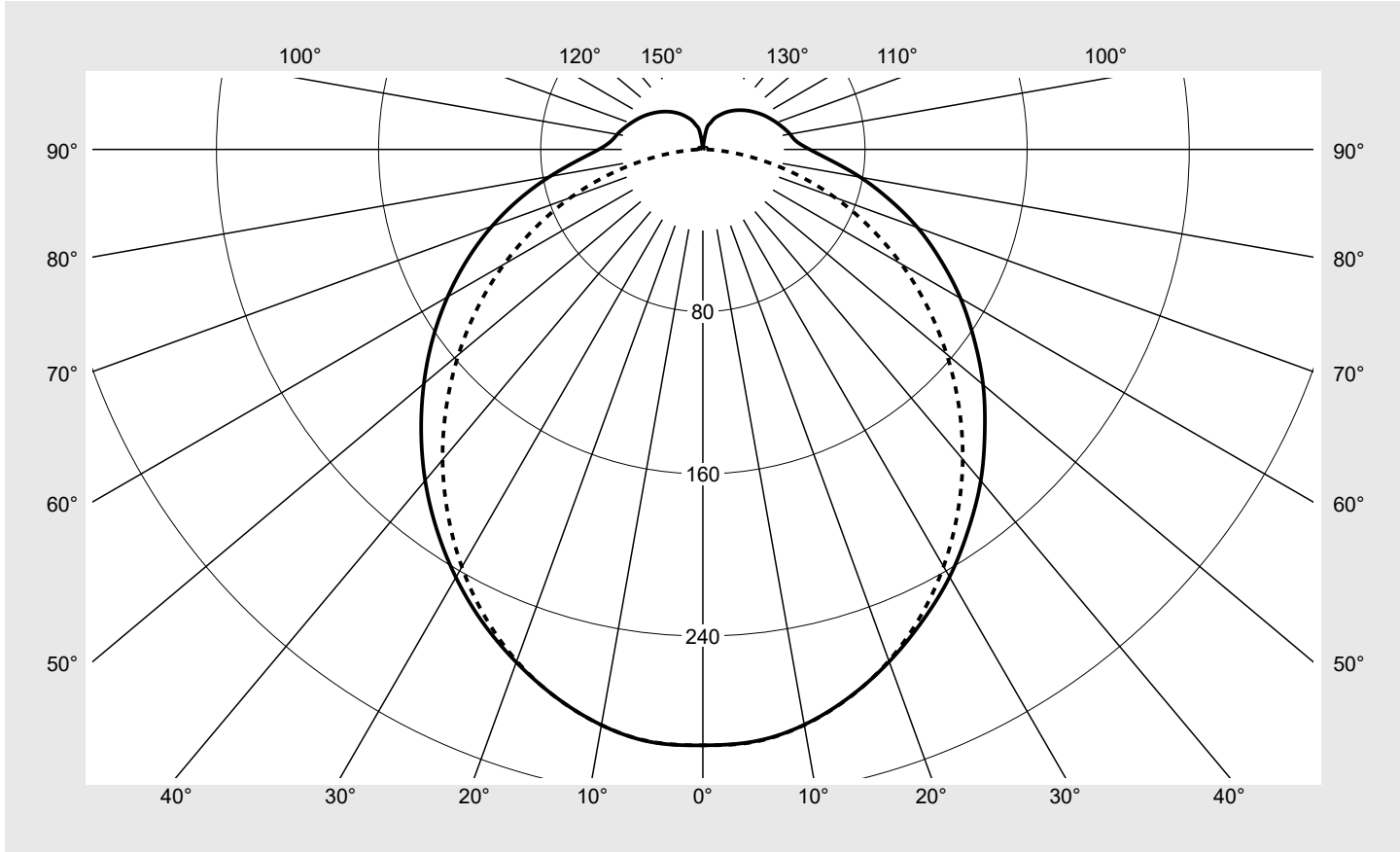


# Photometric test report

<b>Family</b> <b>Licross® 21 Opal</b>	<b>Order number: 52TE1DDN4E5M</b> <b>EAN: 4058352052013</b>	<b>LP number</b> <b>59520_5</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 = 14560 lm Power consumption = 84.6 W Luminous efficacy = 172.1 lm/W	<b>serial documentation</b> <b>26.01.2024</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: 52TE1DDN4E5M</b> <b>EAN: 4058352052013</b>	<b>LP number</b> <b>59520_5</b>
--	--	------------------------------------



<b>Table of values for luminous intensities</b>	<b>Maximum luminous intensity</b>
---	-----------------------------------

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: 52TE1DDN4E5M</b> <b>EAN: 4058352052013</b>	<b>LP number</b> <b>59520_5</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: 52TE1DDN4E5M</b> <b>EAN: 4058352052013</b>	<b>LP number</b> 59520_5
-----------------------------------	--	-----------------------------

<b>UGR-Table</b>	<b>Standard room</b>	<b>siteco</b>
------------------	----------------------	---------------

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	23.1	24.6	23.5	25.1	25.6	22.7	24.3	23.2	24.7	25.2
	3H	25.0	26.4	25.5	26.9	27.4	24.3	25.7	24.8	26.2	26.7
	4H	25.8	27.1	26.3	27.6	28.2	24.8	26.1	25.3	26.6	27.2
	6H	26.6	27.8	27.1	28.3	28.9	25.2	26.4	25.7	26.9	27.5
	8H	27.0	28.1	27.5	28.7	29.3	25.3	26.5	25.9	27.0	27.6
	12H	27.3	28.3	27.9	28.9	29.6	25.3	26.4	25.9	27.0	27.6
4H	2H	23.7	25.1	24.3	25.6	26.1	23.4	24.7	24.0	25.2	25.8
	3H	25.8	26.9	26.3	27.5	28.1	25.1	26.2	25.7	26.8	27.4
	4H	26.8	27.8	27.4	28.4	29.0	25.8	26.8	26.4	27.4	28.0
	6H	27.7	28.6	28.3	29.2	29.9	26.3	27.2	26.9	27.8	28.5
	8H	28.2	29.0	28.8	29.6	30.3	26.5	27.3	27.1	27.9	28.6
	12H	28.6	29.3	29.3	30.0	30.7	26.5	27.3	27.2	27.9	28.6
8H	4H	27.1	27.9	27.7	28.6	29.2	26.2	27.0	26.8	27.6	28.3
	6H	28.3	29.0	28.9	29.6	30.3	26.9	27.6	27.5	28.2	28.9
	8H	28.8	29.5	29.5	30.1	30.8	27.2	27.8	27.8	28.4	29.2
	12H	29.4	29.9	30.1	30.6	31.4	27.3	27.8	28.0	28.5	29.3
12H	4H	27.1	27.8	27.7	28.5	29.2	26.3	27.0	26.9	27.6	28.3
	6H	28.3	28.9	29.0	29.6	30.3	27.0	27.6	27.7	28.3	29.0
	8H	28.9	29.5	29.6	30.1	30.9	27.3	27.8	28.0	28.5	29.3

<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°	26737.2	26706.7	27707.1	31725.5	27818.8	26729.3	26715.2	26695.4	27731.9	31783.1	27831.2	26763.2
50°	25766.9	25673.4	26446.1	30591.8	26486.1	25601.9	25651.3	25613.8	26432.9	30654.9	26525.9	25661.5
55°	24758.4	24669.8	25132.8	29411.0	25147.2	24504.5	24647.9	24555.4	25104.1	29463.8	25219.0	24631.7
60°	23890.0	23676.8	23810.9	28081.3	23779.3	23429.6	23666.0	23498.2	23716.1	28121.5	23889.9	23594.3
65°	22957.7	22685.0	22491.8	26548.6	22403.4	22354.1	22699.2	22459.3	22332.6	26572.2	22544.9	22594.8
70°	22122.4	21582.8	21015.2	24793.9	20873.2	21147.0	21725.2	21264.3	20771.8	24793.9	21055.7	21415.3
75°	21089.0	20332.1	19186.7	22294.8	18963.9	19873.8	20676.3	19950.1	18858.3	22260.9	19227.6	20236.7
80°	20255.5	19178.7	17159.2	18789.5	16736.1	18708.9	19652.3	18686.5	16718.5	18718.2	17023.0	19089.2
85°	19598.5	18407.1	15102.1	13872.5	14727.7	17711.3	19047.5	17869.6	14606.9	13713.7	15063.1	18131.3

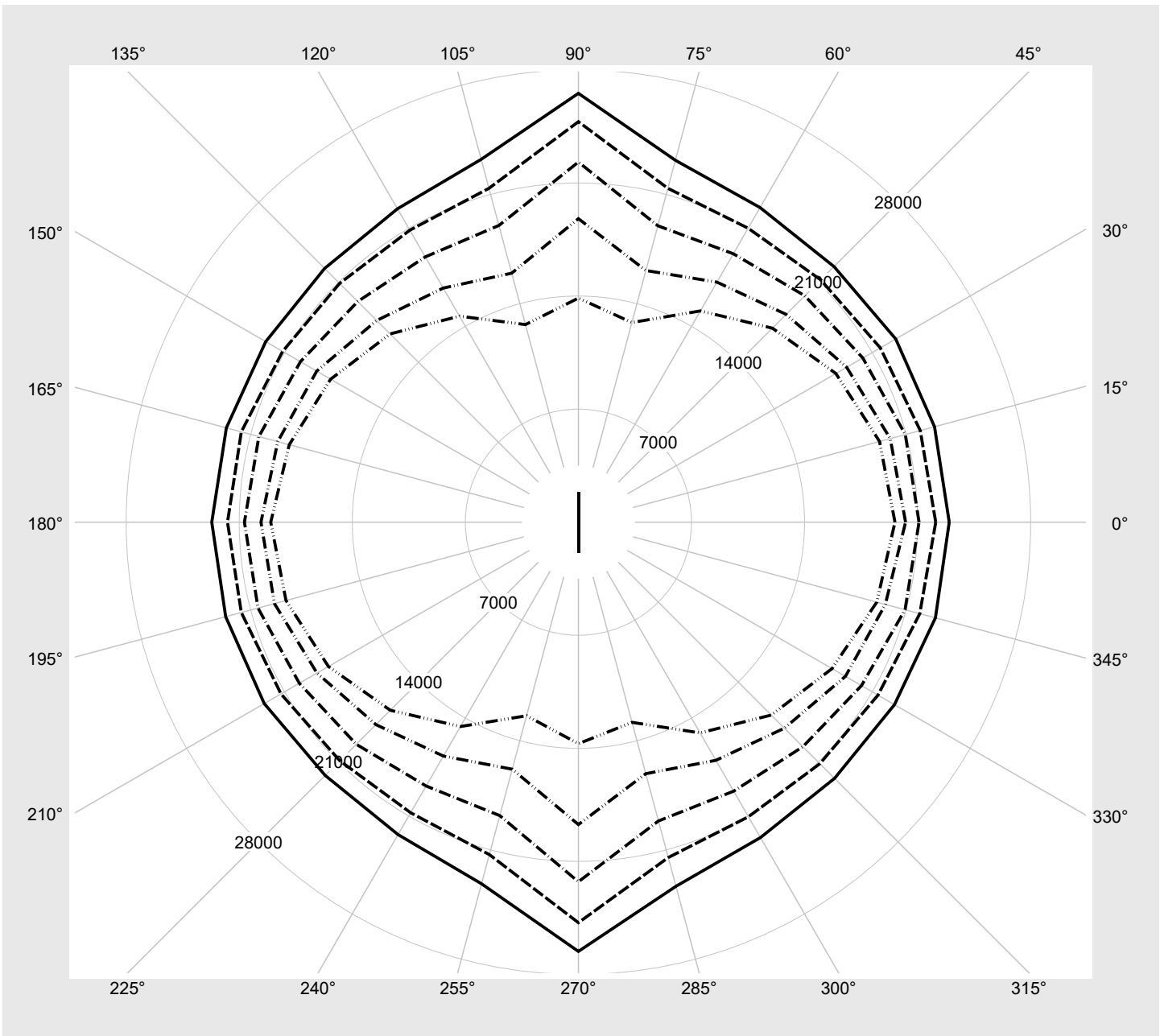
**Photometric test report**

**Family**  
Licross® 21 Opal

**Order number: 52TE1DDN4E5M**  
**EAN: 4058352052013**


**LP number**  
**59520\_5**

**Luminance values in cd/m<sup>2</sup>**     γ 65°   γ 70°   γ 75°   γ 80°   γ 85°     **siteco**



## Photometric test report

<b>Family</b> <b>Licross® 21 Opal</b>	<b>Order number: 52TE1DDN4E5M</b> <b>EAN: 4058352052013</b>	<b>LP number</b> <b>59520_5</b>
--	--	------------------------------------

<b>Dimming levels table</b>	environmental temperature: 25°C	
-----------------------------	---------------------------------	---

Luminous flux %	Dimming level linear	Dimming level logarithmic	Luminous flux [lm]	Power consumption [W]
100	254	254	14560	84.6
95	240	252	13829	80.0
90	226	250	13088	75.2
85	213	248	12395	71.0
80	199	245	11638	66.3
75	186	243	10923	62.0
70	173	240	10204	57.8
65	160	237	9475	53.6
60	147	234	8742	49.3
55	134	231	8001	45.1
50	122	227	7307	41.2
45	109	223	6553	37.1
40	97	219	5851	33.2
35	84	213	5079	29.1
30	72	208	4365	25.4
25	60	201	3645	21.6
20	48	193	2918	17.8
15	36	182	2188	14.0
10	24	168	1454	10.2
5	12	142	712	6.5
1	4	102	217	4.1