



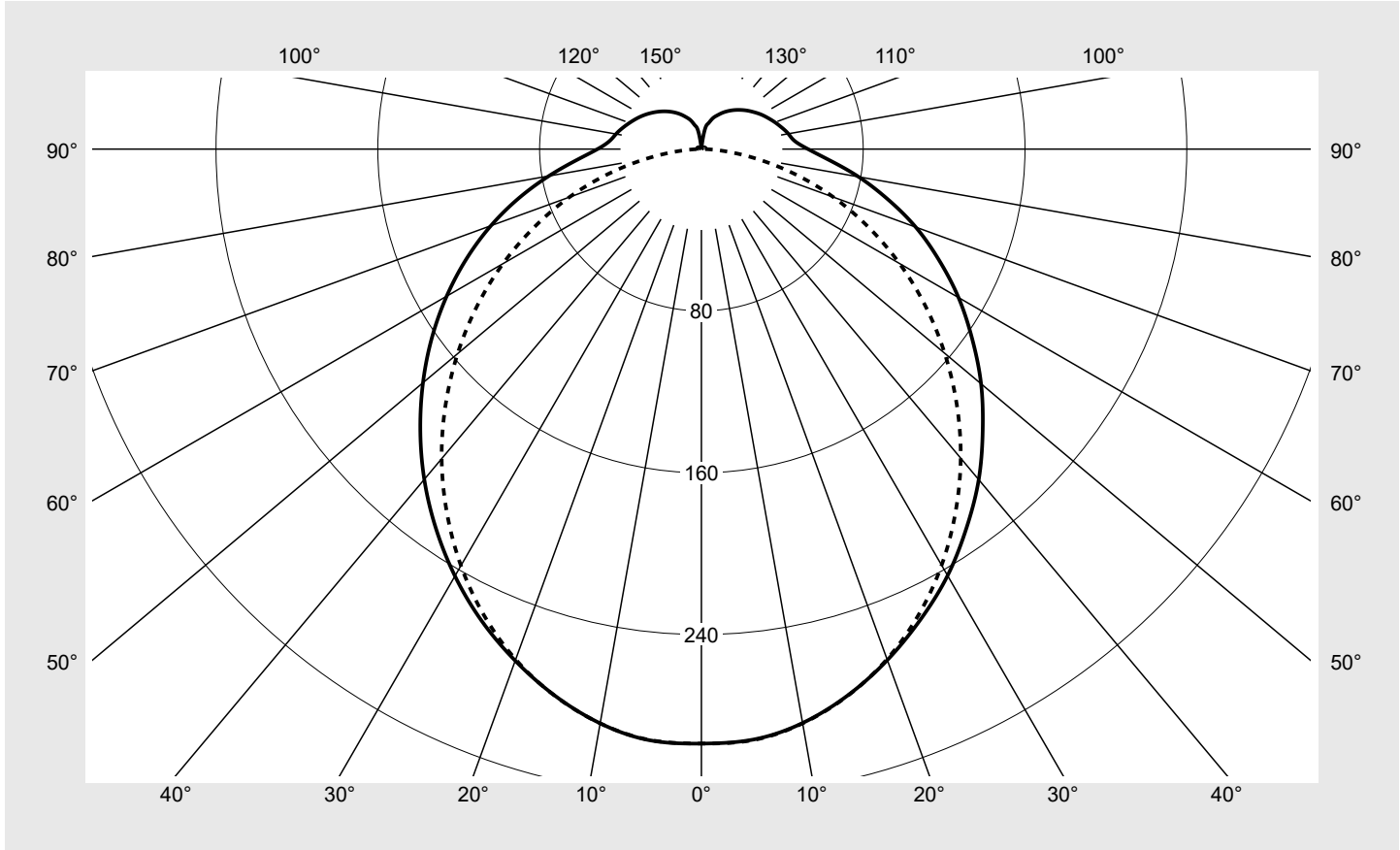
# Photometric test report

<b>Family</b> <b>Licross® 21 Opal</b>	<b>Order number: 52TL1DDN46XG</b> <b>EAN: 4058352049914</b>	<b>LP number</b> <b>59520_88</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 = 6320 lm Power consumption = 36.1 W Luminous efficacy = 175.1 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

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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: 52TL1DDN46XG</b> <b>EAN: 4058352049914</b>	<b>LP number</b> <b>59520_88</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	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> Licross® 21 Opal	<b>Order number: 52TL1DDN46XG</b> <b>EAN: 4058352049914</b>	<b>LP number</b> 59520_88
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UGR-Table		Standard room									
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	20.2	21.7	20.6	22.2	22.7	19.8	21.4	20.3	21.8	22.3
	3H	22.1	23.5	22.6	24.0	24.5	21.4	22.8	21.9	23.3	23.8
	4H	22.9	24.2	23.4	24.7	25.3	21.9	23.2	22.4	23.7	24.3
	6H	23.7	24.9	24.2	25.4	26.0	22.3	23.5	22.8	24.0	24.6
	8H	24.1	25.2	24.6	25.8	26.4	22.4	23.6	23.0	24.1	24.7
	12H	24.4	25.4	25.0	26.0	26.7	22.4	23.5	23.0	24.1	24.7
4H	2H	20.8	22.2	21.4	22.7	23.2	20.5	21.8	21.1	22.3	22.9
	3H	22.9	24.0	23.4	24.6	25.2	22.2	23.3	22.8	23.9	24.5
	4H	23.9	24.9	24.5	25.5	26.1	22.9	23.9	23.5	24.5	25.1
	6H	24.8	25.7	25.4	26.3	27.0	23.4	24.3	24.0	24.9	25.6
	8H	25.3	26.1	25.9	26.7	27.4	23.6	24.4	24.2	25.0	25.7
	12H	25.7	26.4	26.4	27.1	27.8	23.6	24.4	24.3	25.0	25.7
8H	4H	24.2	25.0	24.8	25.7	26.3	23.3	24.1	23.9	24.7	25.4
	6H	25.4	26.1	26.0	26.7	27.4	24.0	24.7	24.6	25.3	26.0
	8H	25.9	26.6	26.6	27.2	27.9	24.3	24.9	24.9	25.5	26.3
	12H	26.5	27.0	27.2	27.7	28.5	24.4	24.9	25.1	25.6	26.4
12H	4H	24.2	24.9	24.8	25.6	26.3	23.4	24.1	24.0	24.7	25.4
	6H	25.4	26.0	26.1	26.7	27.4	24.1	24.7	24.8	25.4	26.1
	8H	26.0	26.6	26.7	27.2	28.0	24.4	24.9	25.1	25.6	26.4

Luminance table		Max. for $\gamma \geq 65^\circ$										Photometric dimensions in mm:		L = 1500	H(C0) = 25	H(C180) = 25
												B = 76	H(C90) = 25	H(C270) = 25		
C-planes	$\gamma$	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°	330°			
		Luminance in cd/m <sup>2</sup>														
45°		11605.7	11592.5	12026.7	13771.0	12075.2	11602.3	11596.2	11587.5	12037.5	13796.0	12080.6	11617.0			
50°		11184.5	11144.0	11479.4	13278.9	11496.7	11112.9	11134.4	11118.1	11473.6	13306.3	11514.0	11138.8			
55°		10746.8	10708.3	10909.3	12766.3	10915.5	10636.6	10698.8	10658.7	10896.8	12789.2	10946.7	10691.8			
60°		10369.8	10277.3	10335.5	12189.1	10321.8	10170.0	10272.6	10199.8	10294.3	12206.6	10369.8	10241.5			
65°		9965.2	9846.8	9762.9	11523.8	9724.5	9703.2	9852.9	9748.8	9693.8	11534.1	9786.0	9807.6			
70°		9602.6	9368.4	9122.0	10762.2	9060.3	9179.2	9430.2	9230.1	9016.3	10762.2	9139.6	9295.6			
75°		9154.0	8825.5	8328.3	9677.4	8231.6	8626.5	8974.9	8659.7	8185.7	9662.7	8346.0	8784.0			
80°		8792.2	8324.8	7448.2	8155.9	7264.6	8120.9	8530.4	8111.2	7257.0	8125.0	7389.1	8286.0			
85°		8507.1	7989.9	6555.3	6021.6	6392.8	7687.9	8267.9	7756.6	6340.3	5952.7	6538.4	7870.2			

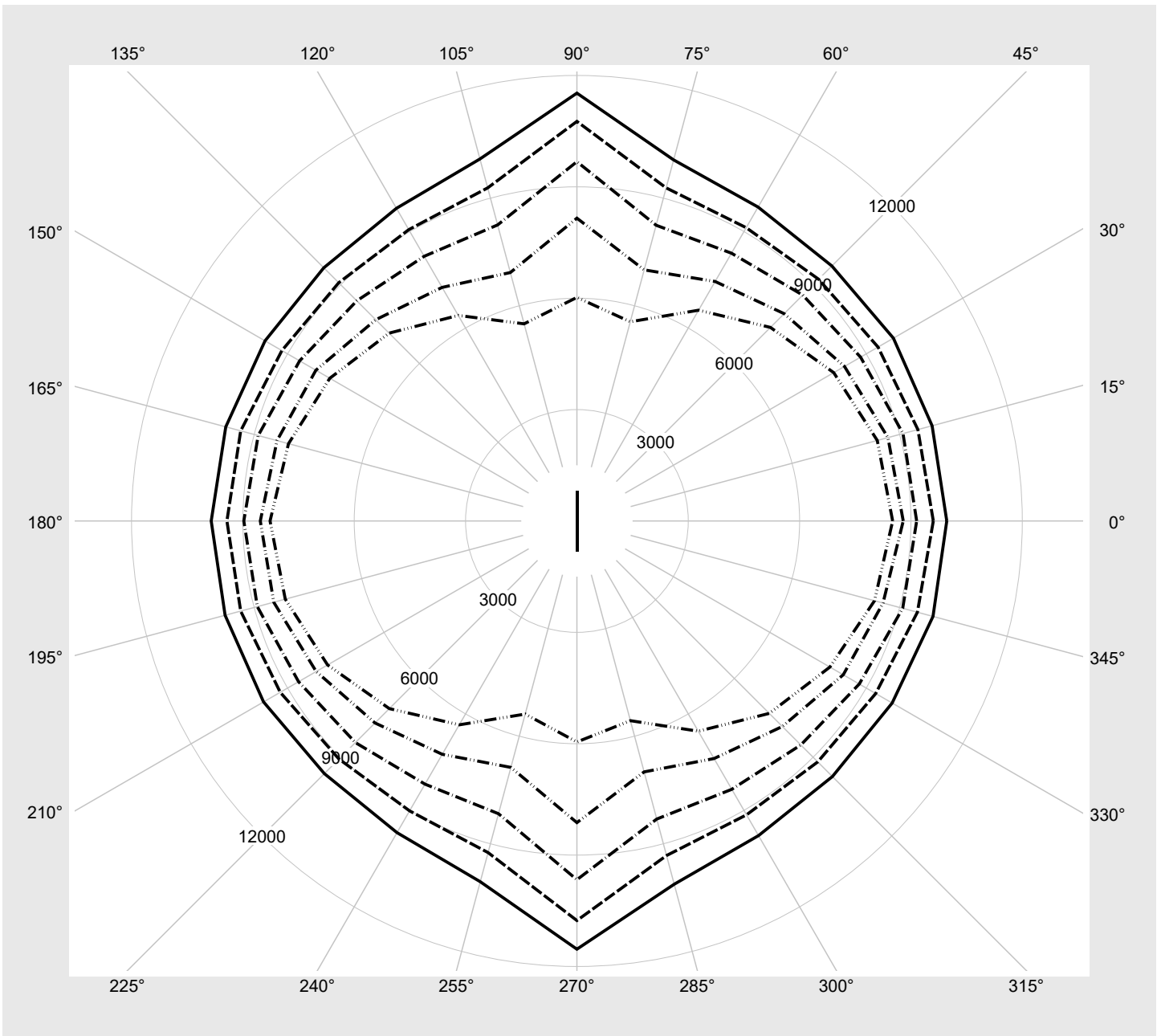
**Photometric test report**

**Family**  
Licross® 21 Opal

**Order number: 52TL1DDN46XG**  
**EAN: 4058352049914**

**LP number**  
**59520\_88**

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



## Photometric test report

Family <b>Licross® 21 Opal</b>	Order number: <b>52TL1DDN46XG</b> EAN: <b>4058352049914</b>	LP number <b>59520_88</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	6320	36.1
95	241	252	6013	34.3
90	227	250	5680	32.4
85	214	248	5368	30.5
80	201	245	5054	28.7
75	188	243	4738	27.1
70	175	240	4421	25.4
65	162	238	4103	23.7
60	149	234	3780	21.9
55	137	231	3484	20.3
50	124	228	3158	18.5
45	111	224	2833	16.7
40	99	219	2530	15.0
35	86	214	2200	13.1
30	74	209	1896	11.7
25	62	202	1588	10.4
20	49	194	1254	8.7
15	37	183	946	7.0
13	31	177	792	6.2