



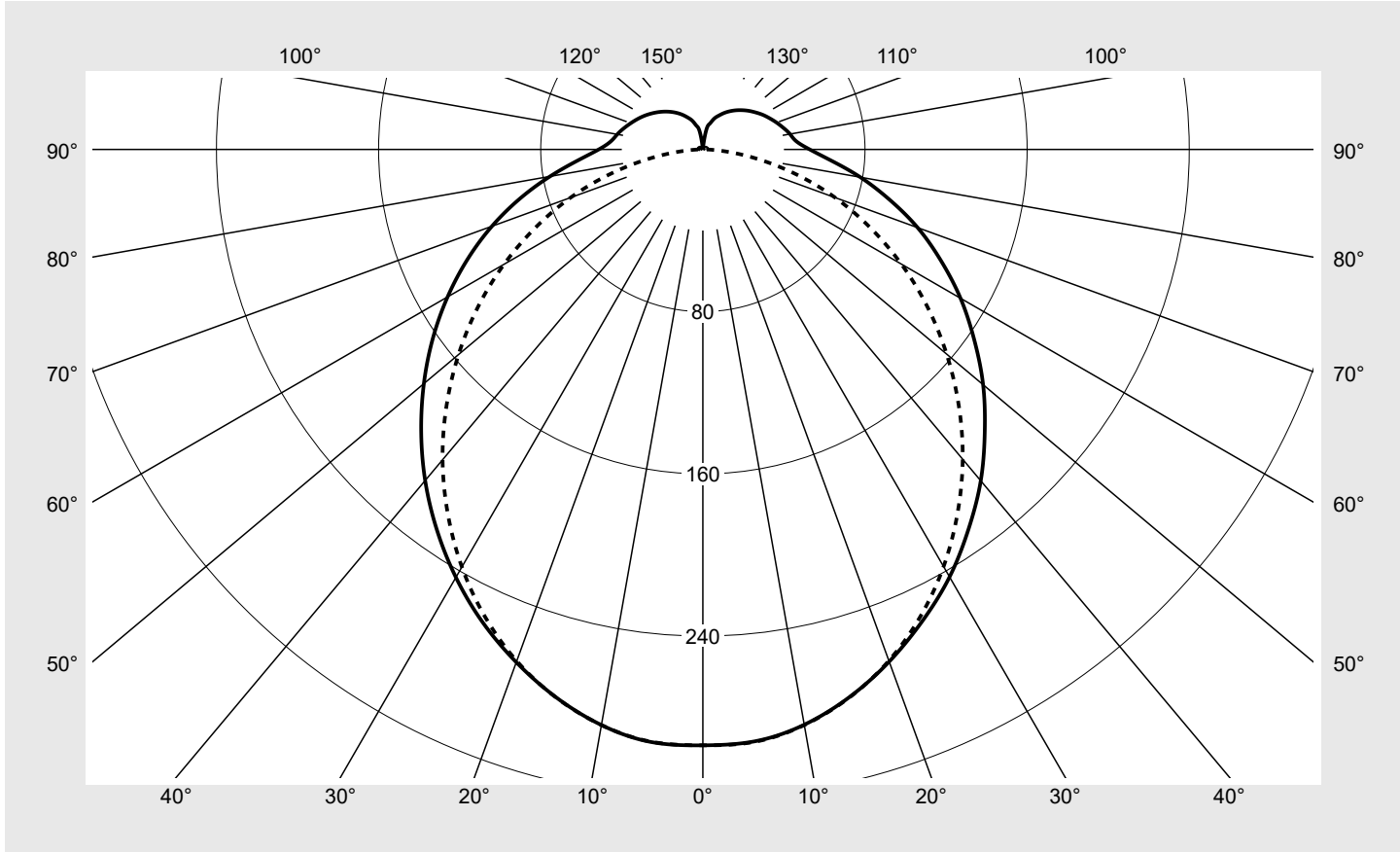
# Photometric test report

<b>Family</b> <b>Licross® 21 Opal</b>	<b>Order number: 52TL1DDV495G</b> <b>EAN: 4058352055434</b>	<b>LP number</b> <b>59520_80</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 = 9500 lm Power consumption = 53.6 W Luminous efficacy = 177.2 lm/W	<b>serial documentation</b> <b>06.02.2024</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

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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: 52TL1DDV495G</b> <b>EAN: 4058352055434</b>	<b>LP number</b> <b>59520_80</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: 52TL1DDV495G</b> <b>EAN: 4058352055434</b>	<b>LP number</b> 59520_80
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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	20.2	21.7	20.7	22.2	22.7	19.9	21.4	20.3	21.9	22.4
	3H	22.1	23.5	22.6	24.0	24.5	21.4	22.9	21.9	23.3	23.8
	4H	22.9	24.2	23.4	24.7	25.3	21.9	23.3	22.5	23.8	24.3
	6H	23.7	24.9	24.2	25.4	26.0	22.3	23.5	22.8	24.1	24.7
	8H	24.1	25.2	24.6	25.8	26.4	22.5	23.6	23.0	24.2	24.8
	12H	24.4	25.4	25.0	26.0	26.7	22.5	23.6	23.1	24.1	24.8
4H	2H	20.9	22.2	21.4	22.7	23.3	20.6	21.9	21.1	22.4	22.9
	3H	22.9	24.0	23.5	24.6	25.2	22.2	23.4	22.8	23.9	24.5
	4H	23.9	25.0	24.5	25.5	26.2	23.0	24.0	23.5	24.5	25.2
	6H	24.9	25.7	25.5	26.3	27.0	23.4	24.3	24.0	24.9	25.6
	8H	25.3	26.2	26.0	26.8	27.5	23.6	24.5	24.2	25.1	25.8
	12H	25.7	26.4	26.4	27.1	27.8	23.7	24.4	24.3	25.1	25.8
8H	4H	24.2	25.1	24.8	25.7	26.4	23.4	24.2	24.0	24.8	25.5
	6H	25.4	26.1	26.0	26.7	27.4	24.0	24.7	24.7	25.4	26.1
	8H	26.0	26.6	26.6	27.2	28.0	24.3	24.9	24.9	25.6	26.3
	12H	26.5	27.0	27.2	27.7	28.5	24.4	25.0	25.1	25.6	26.4
12H	4H	24.2	25.0	24.8	25.6	26.3	23.4	24.1	24.0	24.7	25.5
	6H	25.4	26.0	26.1	26.7	27.4	24.2	24.7	24.8	25.4	26.2
	8H	26.1	26.6	26.7	27.3	28.0	24.5	25.0	25.1	25.7	26.4

<b>Luminance table</b>	<b>Max. for <math>\gamma \geq 65^\circ</math></b>	<b>Photometric dimensions in mm:</b>	<b>L = 2250</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>

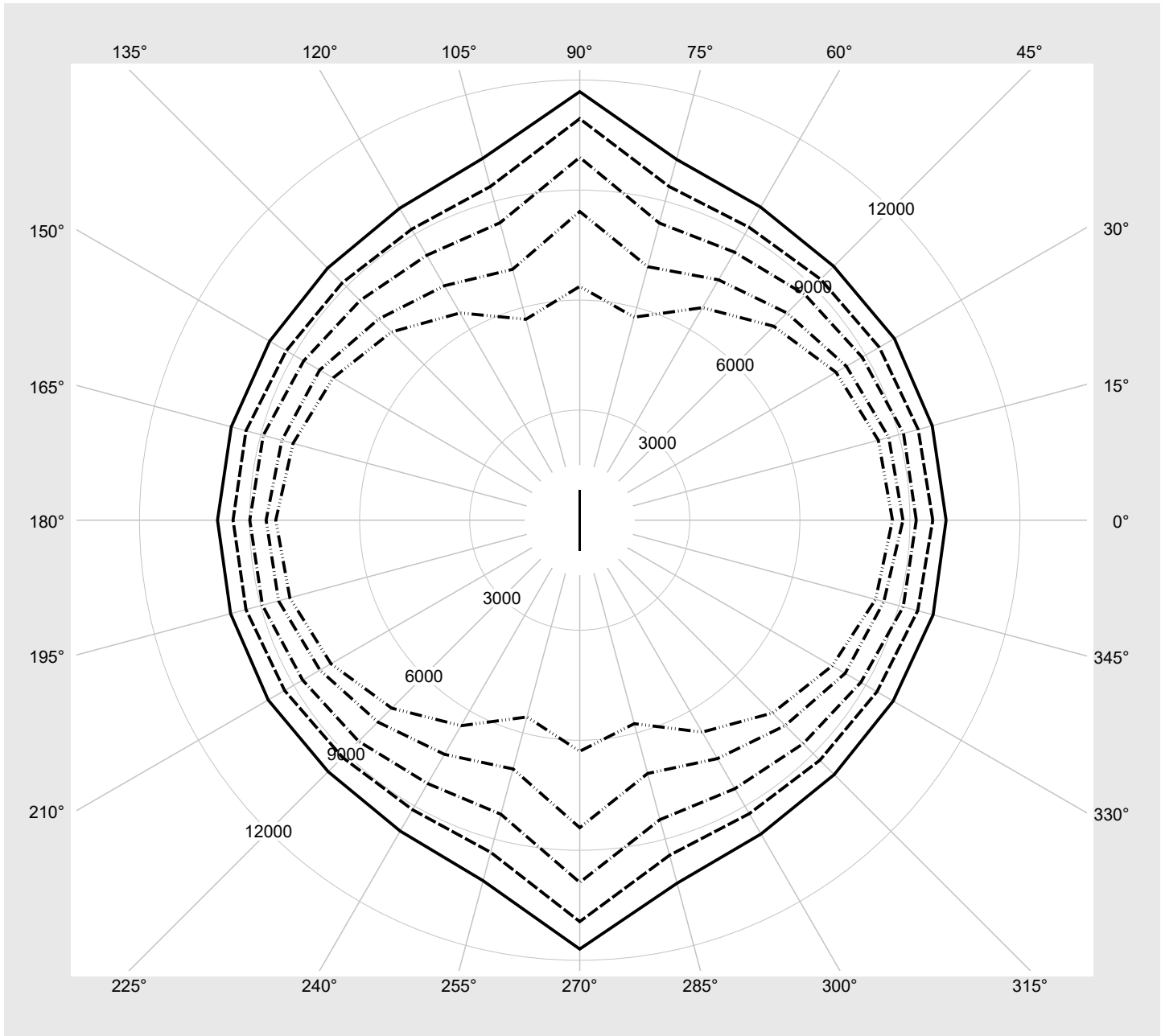
<b>C-planes</b>	<b>0°</b>	<b>30°</b>	<b>60°</b>	<b>90°</b>	<b>120°</b>	<b>150°</b>	<b>180°</b>	<b>210°</b>	<b>240°</b>	<b>270°</b>	<b>300°</b>	<b>330°</b>
$\gamma$	<b>Luminance in cd/m<sup>2</sup></b>											
45°	11630.2	11641.9	12101.5	13875.8	12150.3	11651.8	11620.6	11637.0	12112.3	13901.0	12155.7	11666.6
50°	11208.1	11194.9	11558.2	13393.8	11575.7	11163.7	11157.9	11168.9	11552.4	13421.5	11593.1	11189.7
55°	10769.4	10761.0	10992.5	12893.1	10998.7	10688.9	10721.4	10711.1	10979.9	12916.3	11030.2	10744.4
60°	10391.7	10331.9	10423.6	12330.2	10409.8	10224.1	10294.3	10254.0	10382.1	12347.8	10458.2	10295.9
65°	9986.2	9903.8	9857.0	11682.5	9818.3	9759.3	9873.7	9805.3	9787.3	11692.9	9880.3	9864.4
70°	9622.9	9428.0	9222.9	10944.6	9160.6	9237.6	9450.1	9288.8	9116.1	10944.6	9240.7	9354.8
75°	9173.3	8888.1	8436.7	9890.9	8338.7	8687.7	8993.8	8721.1	8292.3	9875.9	8454.7	8846.4
80°	8810.8	8392.0	7566.4	8415.3	7379.8	8186.5	8548.4	8176.7	7372.1	8383.4	7506.4	8352.9
85°	8525.0	8065.6	6690.0	6374.3	6524.1	7760.7	8285.3	7830.1	6470.6	6301.3	6672.7	7944.7

# Photometric test report

<b>Family</b> <b>Licross® 21 Opal</b>	<b>Order number: 52TL1DDV495G</b> <b>EAN: 4058352055434</b>	<b>LP number</b> <b>59520_80</b>
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**Luminance values in cd/m<sup>2</sup>**

γ 65°
γ 70°
γ 75°
γ 80°
γ 85°



## Photometric test report

Family <b>Licross® 21 Opal</b>	Order number: <b>52TL1DDV495G</b> EAN: <b>4058352055434</b>	LP number <b>59520_80</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	9500	53.6
95	241	252	9040	51.0
90	227	250	8538	48.2
85	214	248	8071	45.6
80	201	245	7599	43.0
75	188	243	7123	40.4
70	175	240	6647	37.8
65	162	238	6167	35.2
60	149	234	5683	32.5
55	137	231	5237	30.0
50	124	228	4748	27.3
45	111	224	4258	24.5
40	99	219	3803	22.0
35	86	214	3307	19.4
30	74	209	2851	17.2
25	62	202	2388	15.1
20	49	194	1885	12.8
15	37	183	1423	10.1
13	31	177	1190	8.7