



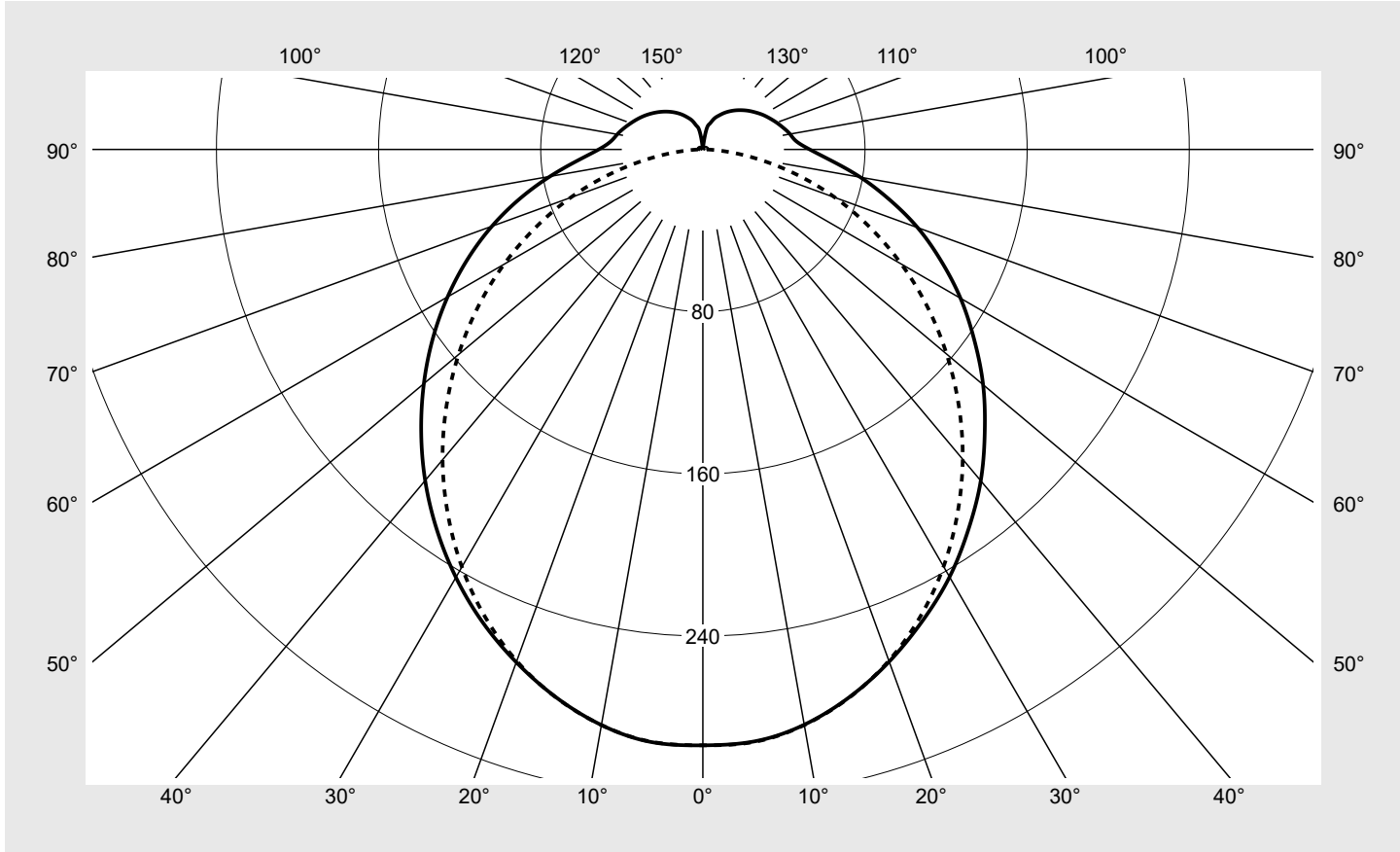
# Photometric test report

<b>Family</b> <b>Licross® 21 Opal</b>	<b>Order number: 52TE1DMN4E5M</b> <b>EAN: 4058352056776</b>	<b>LP number</b> <b>59520_266</b>
	<b>Version</b> cover, opal, direct-/ indirect distribution, diffuse <b>Lamps</b> LED 4000 K   CRI ≥ 80 <b>Controlgear</b> ECG Multilumen <b>Rated values</b> Net luminous flux = 14660 lm Power consumption = 83.1 W Luminous efficacy = 176.4 lm/W	<b>serial documentation</b> <b>09.02.2024</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

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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: 52TE1DMN4E5M</b> <b>EAN: 4058352056776</b>	<b>LP number</b> <b>59520_266</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

Family <b>Licross® 21 Opal</b>	Order number: <b>52TE1DMN4E5M</b> EAN: <b>4058352056776</b>	LP number <b>59520_266</b>
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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	23.1	24.7	23.6	25.1	25.6	22.7	24.3	23.2	24.8	25.3
	3H	25.0	26.5	25.5	26.9	27.4	24.3	25.8	24.8	26.2	26.7
	4H	25.8	27.1	26.4	27.7	28.2	24.8	26.2	25.3	26.7	27.2
	6H	26.6	27.8	27.2	28.3	28.9	25.2	26.4	25.7	26.9	27.5
	8H	27.0	28.1	27.6	28.7	29.3	25.3	26.5	25.9	27.1	27.6
	12H	27.3	28.4	27.9	28.9	29.6	25.4	26.5	25.9	27.0	27.6
4H	2H	23.8	25.1	24.3	25.6	26.2	23.5	24.8	24.0	25.3	25.8
	3H	25.8	27.0	26.4	27.5	28.1	25.1	26.3	25.7	26.8	27.4
	4H	26.8	27.9	27.4	28.4	29.1	25.8	26.9	26.4	27.4	28.1
	6H	27.8	28.6	28.4	29.2	29.9	26.3	27.2	26.9	27.8	28.5
	8H	28.2	29.1	28.9	29.7	30.4	26.5	27.3	27.1	27.9	28.6
	12H	28.6	29.4	29.3	30.0	30.7	26.6	27.3	27.2	27.9	28.7
8H	4H	27.1	28.0	27.7	28.6	29.3	26.2	27.1	26.9	27.7	28.4
	6H	28.3	29.0	28.9	29.6	30.3	26.9	27.6	27.6	28.2	29.0
	8H	28.9	29.5	29.5	30.1	30.9	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	27.9	27.8	28.5	29.2	26.3	27.0	26.9	27.6	28.4
	6H	28.3	28.9	29.0	29.6	30.3	27.0	27.6	27.7	28.3	29.0
	8H	29.0	29.5	29.6	30.2	30.9	27.4	27.9	28.0	28.5	29.3

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°		26920.9	26890.1	27897.4	31943.4	28009.9	26912.9	26898.7	26878.7	27922.4	32001.4	28022.4	26947.1			
50°		25943.9	25849.8	26627.8	30801.9	26668.0	25777.7	25827.5	25789.7	26614.4	30865.5	26708.1	25837.8			
55°		24928.4	24839.2	25305.4	29613.0	25319.9	24672.8	24817.2	24724.0	25276.5	29666.2	25392.2	24800.8			
60°		24054.1	23839.4	23974.4	28274.1	23942.6	23590.5	23828.5	23659.6	23879.0	28314.6	24053.9	23756.3			
65°		23115.4	22840.8	22646.3	26730.9	22557.3	22507.7	22855.1	22613.6	22486.0	26754.7	22699.8	22750.0			
70°		22274.4	21731.0	21159.5	24964.2	21016.6	21292.3	21874.4	21410.3	20914.5	24964.2	21200.3	21562.4			
75°		21233.8	20471.7	19318.5	22448.0	19094.2	20010.3	20818.3	20087.2	18987.8	22413.8	19359.6	20375.6			
80°		20394.6	19310.5	17277.1	18918.5	16851.0	18837.4	19787.3	18814.9	16833.4	18846.8	17139.9	19220.3			
85°		19733.1	18533.5	15205.8	13967.8	14828.8	17832.9	19178.3	17992.3	14707.2	13807.9	15166.6	18255.8			

**Photometric test report**

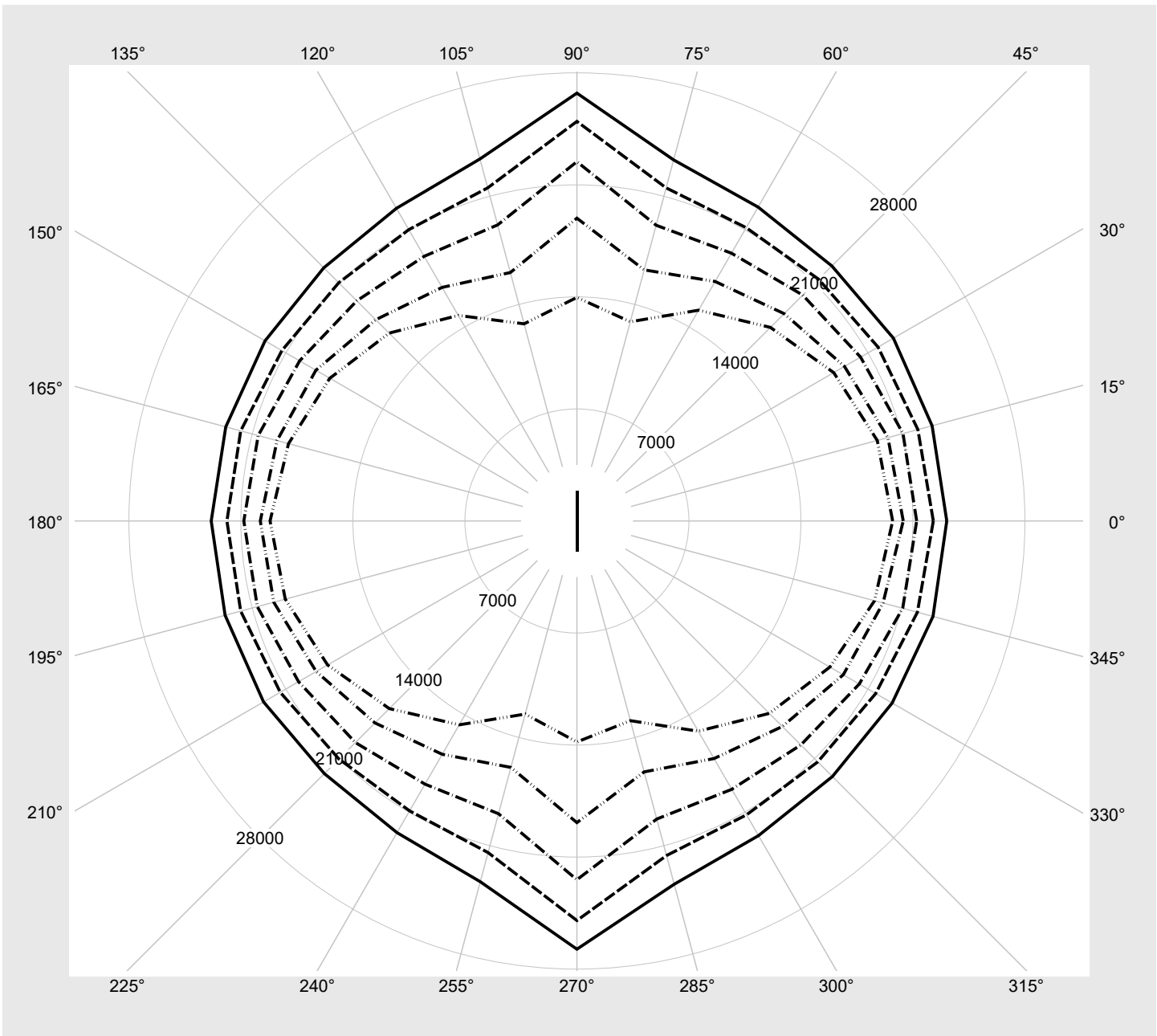
**Family**  
Licross® 21 Opal

**Order number: 52TE1DMN4E5M**  
**EAN: 4058352056776**

**LP number**  
**59520\_266**


**Luminance values in cd/m<sup>2</sup>**

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



### Photometric test report

<b>Family</b> <b>Licross® 21 Opal</b>	<b>Order number: 52TE1DMN4E5M</b> <b>EAN: 4058352056776</b>	<b>LP number</b> <b>59520_266</b>
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<b>Multilumen Table</b>	environmental temperature: 25°C	
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DIP-Step	Switch Setting			Luminous flux [lm]	Power consumption [W]
	1	2	3		
1	A	C	E	14660	83.1
2	A	C	F	13767	77.5
3	A	D	E	12728	71.1
4	A	D	F	11804	65.4
5	B	C	E	10795	59.4
6	B	C	F	9850	53.9
7	B	D	E	8821	47.9
8	B	D	F	7834	42.4