



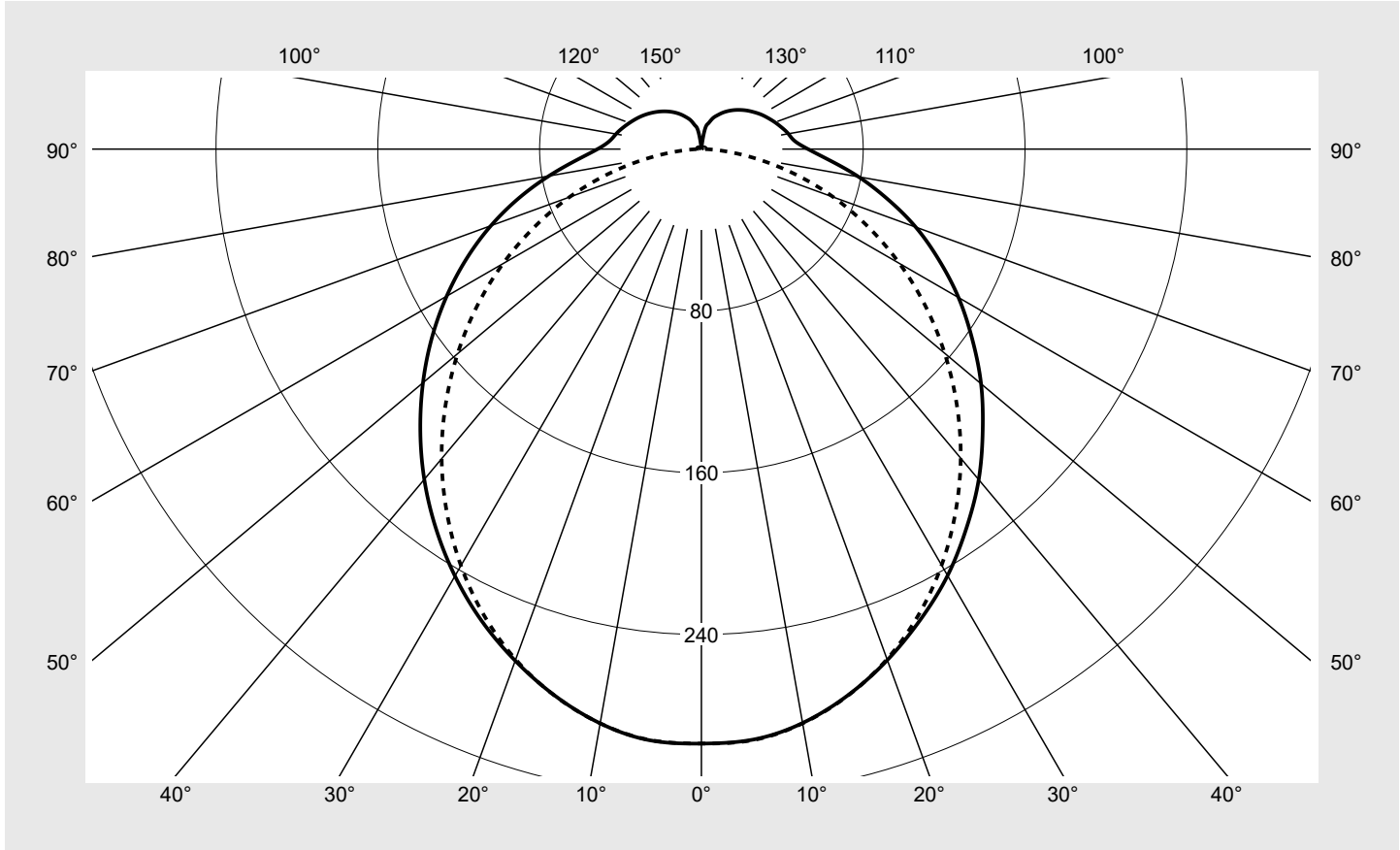
Photometric test report

Family Licross® 21 Opal	Order number: 52TL1DDN445G EAN: 4058352049891	LP number 59520_87
	Version cover, opal, direct-/ indirect distribution, diffuse Lamps LED 4000 K CRI ≥ 80 Controlgear ECG-DALI Rated values Net luminous flux = 4500 lm Power consumption = 25.8 W Luminous efficacy = 174.4 lm/W	serial documentation 21.02.2024





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	
η_{LB}	100.0%
ϕ_u	87.4%
ϕ_o	12.6%

Measurement conditions
DIN EN 13032 and DIN 5032

Photometric test report

Family Licross® 21 Opal	Order number: 52TL1DDN445G EAN: 4058352049891	LP number 59520_87
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Table of values for luminous intensities	Maximum luminous intensity	siteco
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C-planes	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°	165°	180°
γ	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

Family Licross® 21 Opal	Order number: 52TL1DDN445G EAN: 4058352049891	LP number 59520_87
Table of values for luminous intensities		Maximum luminous intensity
		siteco

C-planes	195°	210°	225°	240°	255°	270°	285°	300°	315°	330°	345°	Phi-zone	Total Phi-zone
γ	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 Licross® 21 Opal	Order number: 52TL1DDN445G EAN: 4058352049891	LP number 59520_87
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UGR-Table	Standard room	siteco
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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	19.0	20.6	19.5	21.0	21.5	18.6	20.2	19.1	20.7	21.2
	3H	20.9	22.4	21.4	22.8	23.3	20.2	21.7	20.7	22.1	22.6
	4H	21.7	23.0	22.2	23.5	24.1	20.7	22.0	21.2	22.6	23.1
	6H	22.5	23.7	23.0	24.2	24.8	21.1	22.3	21.6	22.8	23.4
	8H	22.9	24.0	23.5	24.6	25.2	21.2	22.4	21.8	22.9	23.5
	12H	23.2	24.3	23.8	24.8	25.5	21.3	22.3	21.8	22.9	23.5
4H	2H	19.7	21.0	20.2	21.5	22.1	19.3	20.7	19.9	21.2	21.7
	3H	21.7	22.8	22.3	23.4	24.0	21.0	22.2	21.6	22.7	23.3
	4H	22.7	23.8	23.3	24.3	25.0	21.7	22.8	22.3	23.3	24.0
	6H	23.7	24.5	24.3	25.1	25.8	22.2	23.1	22.8	23.7	24.4
	8H	24.1	25.0	24.8	25.6	26.3	22.4	23.2	23.0	23.8	24.5
	12H	24.5	25.3	25.2	25.9	26.6	22.5	23.2	23.1	23.8	24.6
8H	4H	23.0	23.9	23.6	24.5	25.2	22.1	22.9	22.8	23.6	24.3
	6H	24.2	24.9	24.8	25.5	26.2	22.8	23.5	23.5	24.1	24.9
	8H	24.8	25.4	25.4	26.0	26.8	23.1	23.7	23.7	24.3	25.1
	12H	25.3	25.8	26.0	26.5	27.3	23.2	23.7	23.9	24.4	25.2
12H	4H	23.0	23.8	23.6	24.4	25.1	22.2	22.9	22.8	23.5	24.3
	6H	24.2	24.8	24.9	25.5	26.2	22.9	23.5	23.6	24.2	24.9
	8H	24.9	25.4	25.5	26.1	26.8	23.2	23.8	23.9	24.4	25.2

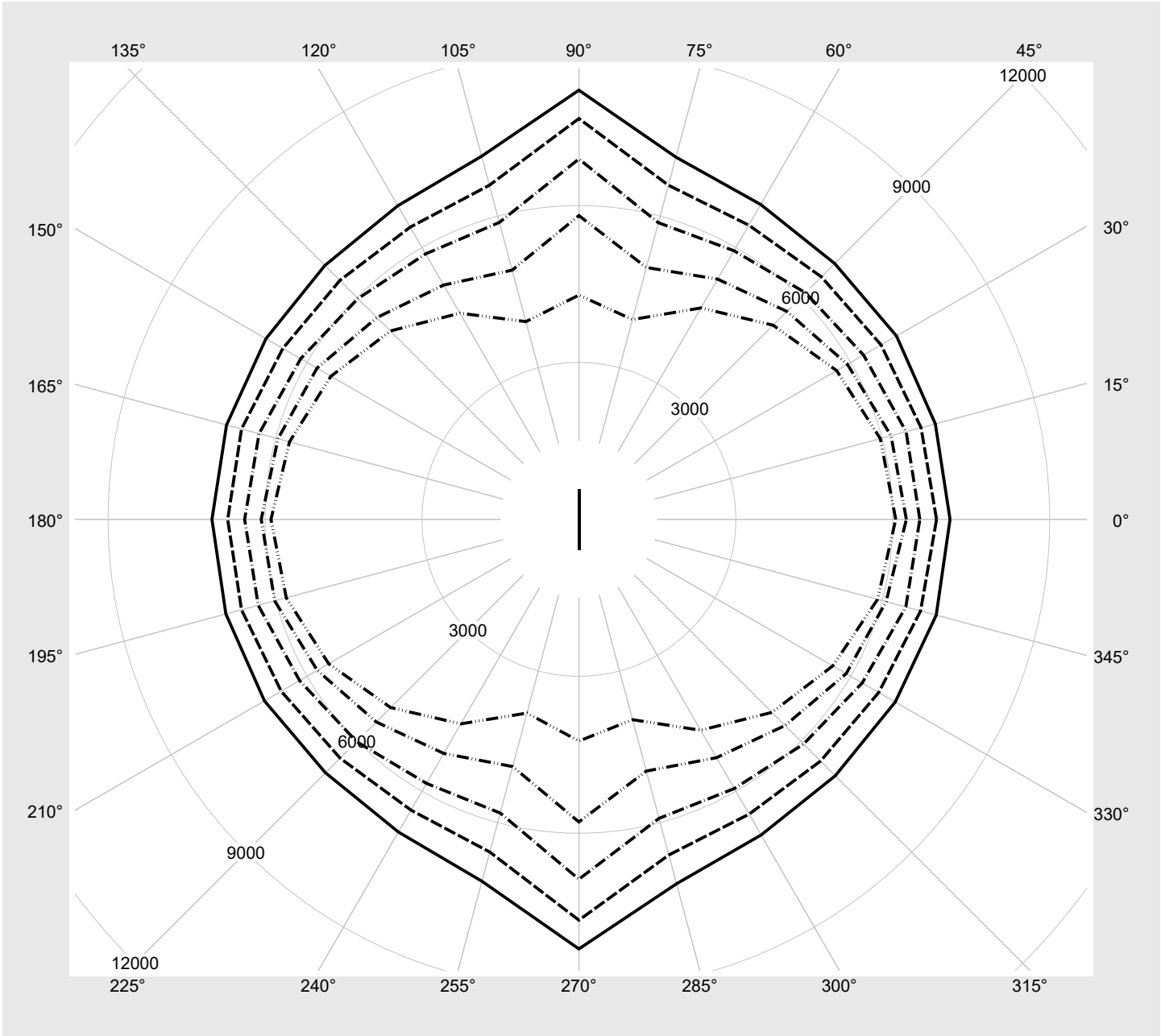
Luminance table	Max. for $\gamma \geq 65^\circ$	Photometric dimensions in mm:	L = 1500	H(C0) = 25	H(C180) = 25
			B = 76	H(C90) = 25	H(C270) = 25

C-planes	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°	330°
γ	Luminance in cd/m ²											
45°	8263.6	8254.1	8563.3	9805.3	8597.8	8261.1	8256.8	8250.6	8571.0	9823.1	8601.7	8271.6
50°	7963.7	7934.8	8173.6	9454.9	8186.0	7912.7	7927.9	7916.4	8169.5	9474.4	8198.3	7931.1
55°	7652.0	7624.6	7767.7	9089.9	7772.1	7573.5	7617.8	7589.2	7758.8	9106.3	7794.3	7612.8
60°	7383.6	7317.7	7359.1	8679.0	7349.4	7241.3	7314.3	7262.5	7329.8	8691.4	7383.5	7292.2
65°	7095.4	7011.1	6951.5	8205.3	6924.1	6908.9	7015.5	6941.4	6902.3	8212.6	6967.9	6983.3
70°	6837.3	6670.5	6495.1	7662.9	6451.2	6535.8	6714.5	6572.1	6419.9	7662.9	6507.6	6618.7
75°	6517.9	6284.0	5930.0	6890.6	5861.1	6142.3	6390.3	6165.9	5828.5	6880.1	5942.6	6254.5
80°	6260.3	5927.5	5303.3	5807.2	5172.6	5782.3	6073.9	5775.4	5167.1	5785.2	5261.2	5899.8
85°	6057.2	5689.0	4667.5	4287.5	4551.8	5474.0	5886.9	5522.9	4514.5	4238.4	4655.5	5603.8

Photometric test report

Family Licross® 21 Opal	Order number: 52TL1DDN445G EAN: 4058352049891	LP number 59520_87
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Luminance values in cd/m² γ 65° γ 70° γ 75° γ 80° γ 85° **siteco**



Photometric test report

Family Licross® 21 Opal	Order number: 52TL1DDN445G EAN: 4058352049891	LP number 59520_87
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Dimming levels table	environmental temperature: 25°C	sITeco
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Luminous flux %	Dimming level linear	Dimming level logarithmic	Luminous flux [lm]	Power consumption [W]
100	254	254	4500	25.8
95	241	252	4275	24.6
90	228	250	4053	23.4
85	215	248	3825	22.2
80	202	246	3600	20.9
75	189	243	3374	19.7
70	176	241	3145	18.4
65	163	238	2918	17.2
60	151	235	2704	16.0
55	138	232	2475	14.7
50	125	228	2242	13.4
45	113	224	2030	12.1
40	100	220	1796	11.4
35	88	215	1582	10.4
30	75	209	1349	9.2
25	63	203	1131	8.0
20	50	194	897	6.7
18	44	190	789	6.2