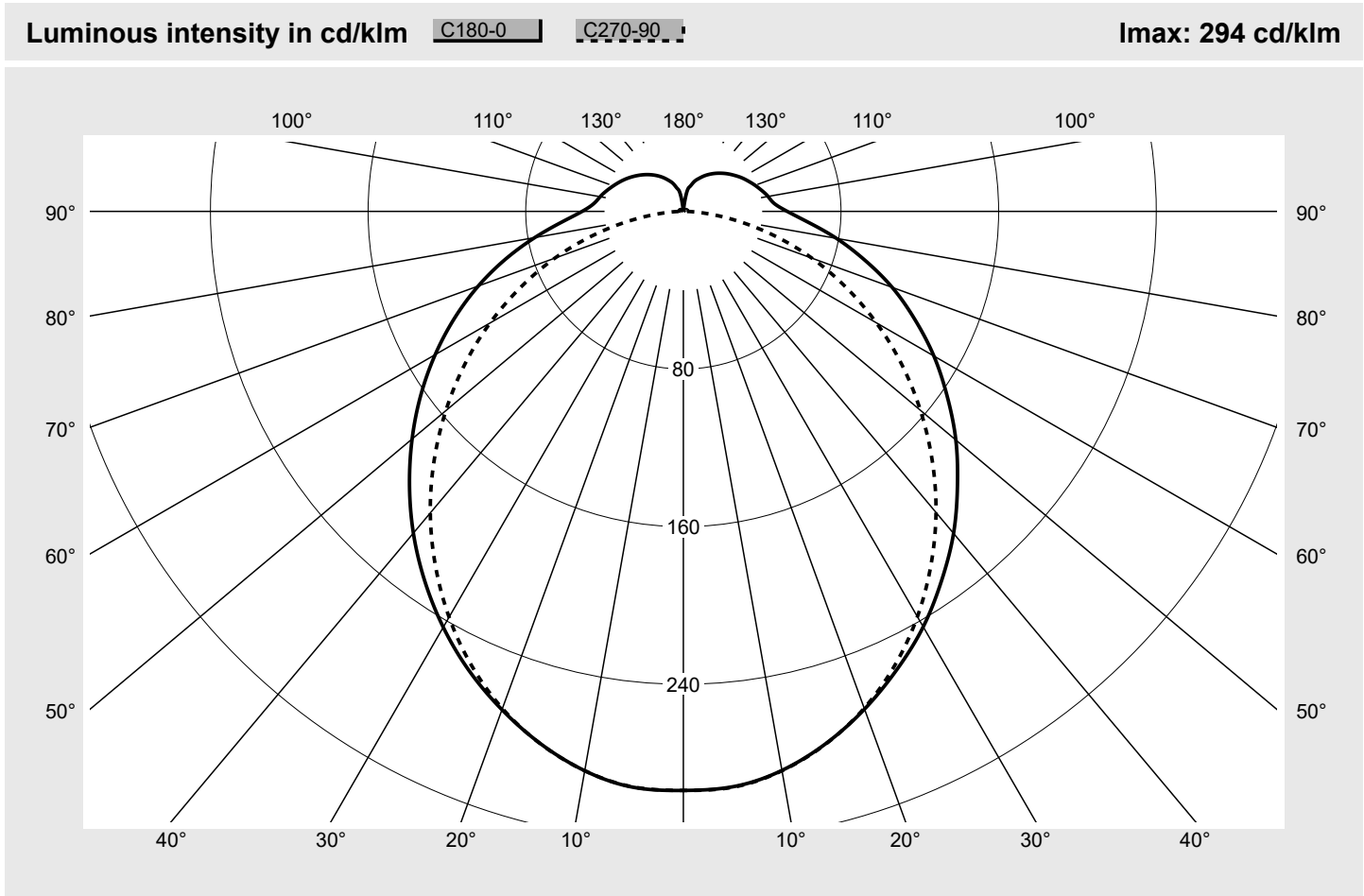


Photometric test report

Family Licross® 21 Opal	Order number: 52TL1DDV495G EAN: 4058352055434	LP number 59520_80
	Version	cover, opal, direct-/ indirect distribution, diffuse
	Lamps	LED 4000 K CRI ≥ 80
	Controlgear	ECG-DALI
	Rated values	Net luminous flux = 9500 lm Power consumption = 53.6 W Luminous efficacy = 177.2 lm/W
		serial documentation 06.02.2024
		siteco



Classifications		Luminaire light output ratios	
DIN 5040	B 3 1	η_{LB}	100.0%
CIE	N1=44 N2=73 N3=91	ϕ_u	87.4%
	N4=87 N5=100	ϕ_o	12.6%

Measurement conditions
DIN EN 13032 and DIN 5032

Photometric test report

Family Licross® 21 Opal	Order number: 52TL1DDV495G EAN: 4058352055434	LP number 59520_80
Table of values for luminous intensities		Maximum luminous intensity

sitEco

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: 52TL1DDV495G EAN: 4058352055434										LP number 59520_80	
Table of values for luminous intensities										Maximum luminous intensity		sīTeco	
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: 52TL1DDV495G EAN: 4058352055434							LP number 59520_80	
UGR-Table			Standard room							siteco	
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

Luminance table		Max. for $\gamma \geq 65^\circ$						Photometric dimensions in mm:		L = 2250 B = 76	H(C0) = 25 H(C90) = 25	H(C180) = 25 H(C270) = 25
C-planes	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°	330°
γ	Luminance in cd/m²											
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

Family
Licross® 21 Opal

Order number: **52TL1DDV495G**
EAN: **4058352055434**

LP number
59520_80

Luminance values in cd/m²

γ 65°

γ 70°

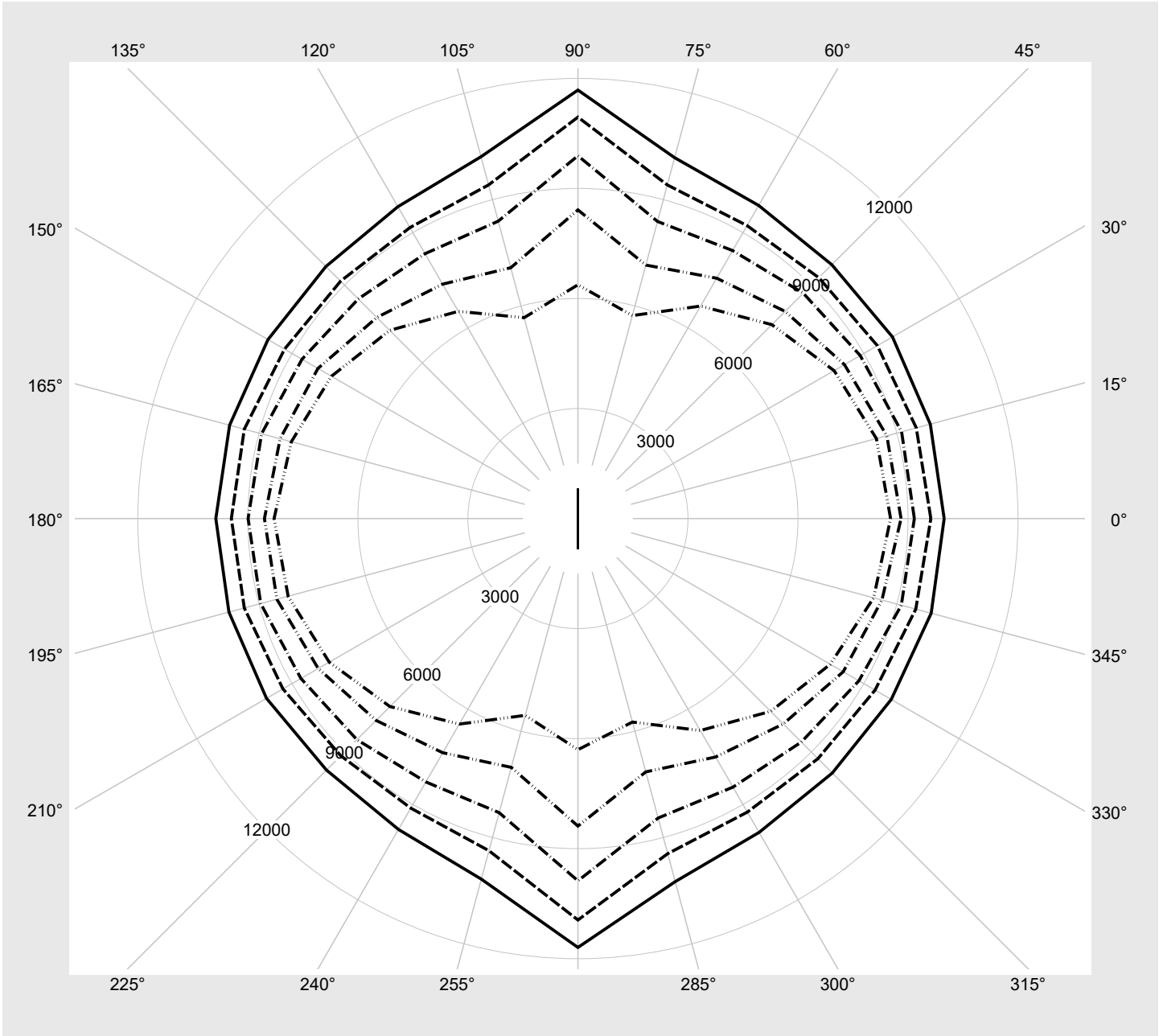
γ 75°

γ 80°

γ 85°

sit

eco



Photometric test report

Family Licross® 21 Opal	Order number: 52TL1DDV495G EAN: 4058352055434	LP number 59520_80
Dimming levels table environmental temperature: 25°C		

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