

Lichttechnischer Prüfbefund

Familie
Licross® 21 Opal

Bestell-Nr.: 52TL1DDN4E5M
EAN: 4058352049952

LP-Nummer
59520_3



Ausführung Abdeckung, opal, direkt-/ indirekt strahlend, diffus

Bestückung LED 4000 K | CRI ≥ 80

Betriebsgerät EVG-DALI

Bemessungswerte Nettolichtstrom = 14560 lm
Systemleistung = 84.6 W
Lichtausbeute = 172.1 lm/W

Seriendokumentation
26.01.2024

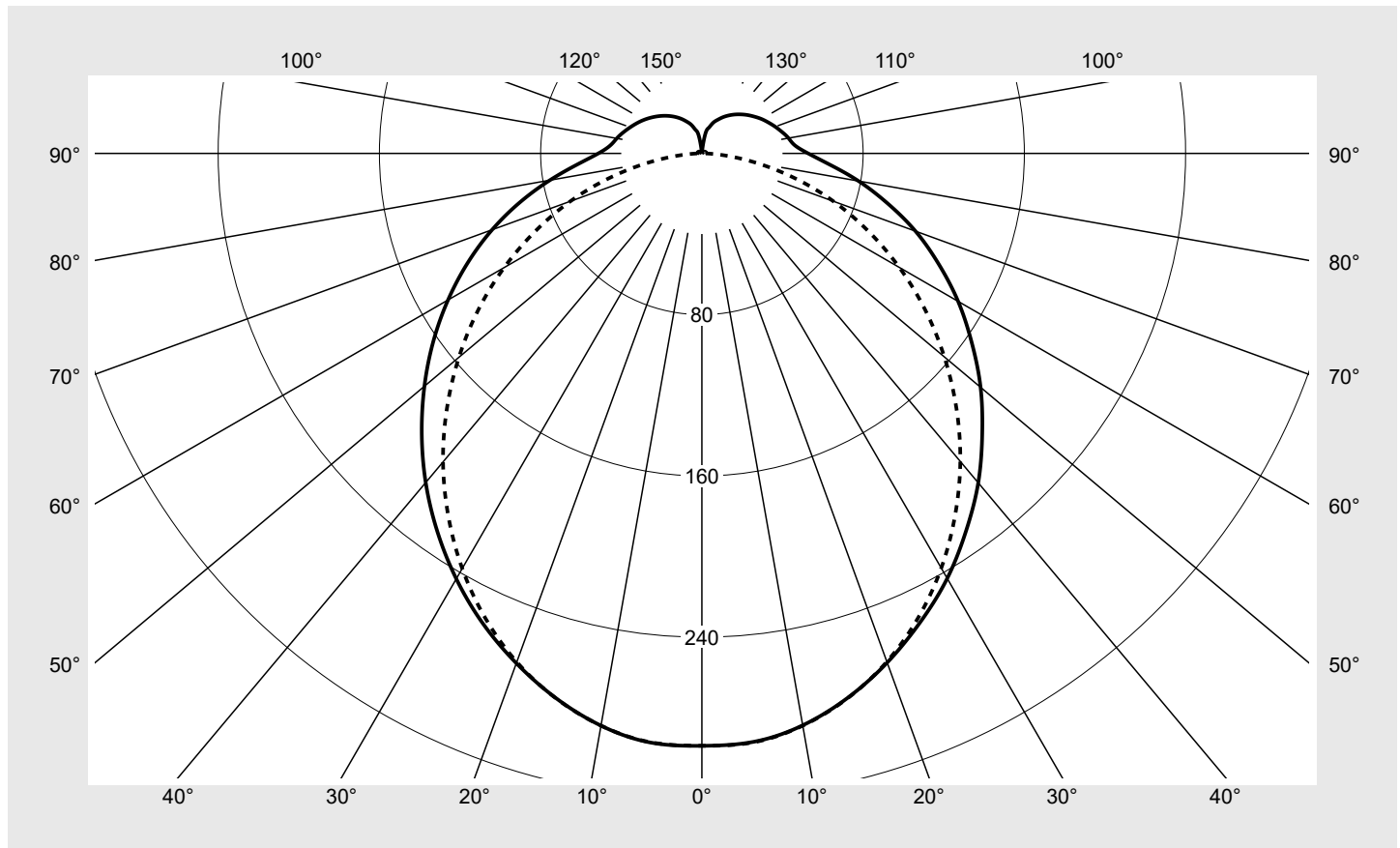
siteco

Lichtstärke in cd/klm

C180-0

C270-90

Imax: 294 cd/klm



Klassifizierungen

DIN 5040 B 3 1
CIE N1=44 N2=73 N3=91
N4=87 N5=100

Leuchtenbetriebswirkungsgrade

η_{LB} 100,0%
 ϕ_u 87,4%
 ϕ_o 12,6%

Messbedingungen

DIN EN 13032 und DIN 5032

Lichttechnischer Prüfbefund

Familie Licross® 21 Opal	Bestell-Nr.: 52TL1DDN4E5M EAN: 4058352049952	LP-Nummer 59520_3
---	---	------------------------------------

Wertetabelle Lichtstärkemessung	Maximale Lichtstärke	siteco
--	-----------------------------	---------------

C- Ebenen	0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°	165°	180°
γ	Lichtstärke 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

Lichttechnischer Prüfbefund

Familie Licross® 21 Opal	Bestell-Nr.: 52TL1DDN4E5M EAN: 4058352049952	LP-Nummer 59520_3
Wertetabelle Lichtstärkemessung		Maximale Lichtstärke
		siteco

C- Ebenen	195°	210°	225°	240°	255°	270°	285°	300°	315°	330°	345°	Phi-Zone	Summe Phi-Zone
γ	Lichtstärke in cd/klm											Lichtstrom 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

Lichttechnischer Prüfbefund

Familie Licross® 21 Opal	Bestell-Nr.: 52TL1DDN4E5M EAN: 4058352049952	LP-Nummer 59520_3
------------------------------------	---	-----------------------------

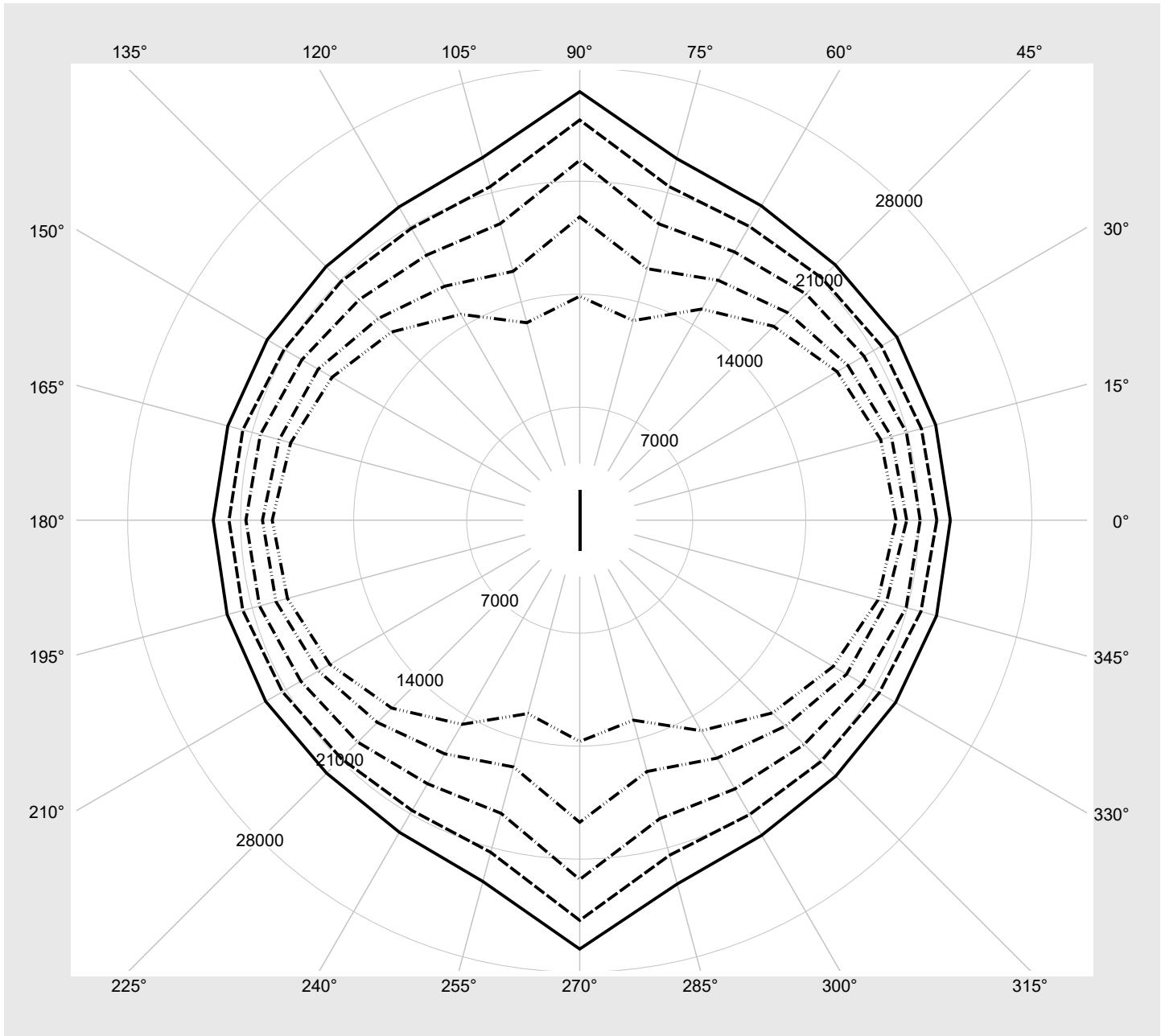
UGR-Tabelle		Standardraum									
		Blickrichtung quer zur Leuchte (C0)					Blickrichtung längs zur Leuchte (C90)				
Raumabmessungen											
x	y										
2H	2H	23,1	24,6	23,5	25,1	25,6	22,7	24,3	23,2	24,7	25,2
	3H	25,0	26,4	25,5	26,9	27,4	24,3	25,7	24,8	26,2	26,7
	4H	25,8	27,1	26,3	27,6	28,2	24,8	26,1	25,3	26,6	27,2
	6H	26,6	27,8	27,1	28,3	28,9	25,2	26,4	25,7	26,9	27,5
	8H	27,0	28,1	27,5	28,7	29,3	25,3	26,5	25,9	27,0	27,6
	12H	27,3	28,3	27,9	28,9	29,6	25,3	26,4	25,9	27,0	27,6
4H	2H	23,7	25,1	24,3	25,6	26,1	23,4	24,7	24,0	25,2	25,8
	3H	25,8	26,9	26,3	27,5	28,1	25,1	26,2	25,7	26,8	27,4
	4H	26,8	27,8	27,4	28,4	29,0	25,8	26,8	26,4	27,4	28,0
	6H	27,7	28,6	28,3	29,2	29,9	26,3	27,2	26,9	27,8	28,5
	8H	28,2	29,0	28,8	29,6	30,3	26,5	27,3	27,1	27,9	28,6
	12H	28,6	29,3	29,3	30,0	30,7	26,5	27,3	27,2	27,9	28,6
8H	4H	27,1	27,9	27,7	28,6	29,2	26,2	27,0	26,8	27,6	28,3
	6H	28,3	29,0	28,9	29,6	30,3	26,9	27,6	27,5	28,2	28,9
	8H	28,8	29,5	29,5	30,1	30,8	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	27,8	27,7	28,5	29,2	26,3	27,0	26,9	27,6	28,3
	6H	28,3	28,9	29,0	29,6	30,3	27,0	27,6	27,7	28,3	29,0
	8H	28,9	29,5	29,6	30,1	30,9	27,3	27,8	28,0	28,5	29,3

Leuchtdichten-Tabelle		Max. für $\gamma \geq 65^\circ$											
		Lichttechnische Abmessungen in mm: L = 1500 B = 76 H(C0) = 25 H(C90) = 25 H(C180) = 25 H(C270) = 25											
C-Ebenen	γ	0°	30°	60°	90°	120°	150°	180°	210°	240°	270°	300°	330°
		Leuchtdichte in cd/m ²											
45°		26737.2	26706.7	27707.1	31725.5	27818.8	26729.3	26715.2	26695.4	27731.9	31783.1	27831.2	26763.2
50°		25766.9	25673.4	26446.1	30591.8	26486.1	25601.9	25651.3	25613.8	26432.9	30654.9	26525.9	25661.5
55°		24758.4	24669.8	25132.8	29411.0	25147.2	24504.5	24647.9	24555.4	25104.1	29463.8	25219.0	24631.7
60°		23890.0	23676.8	23810.9	28081.3	23779.3	23429.6	23666.0	23498.2	23716.1	28121.5	23889.9	23594.3
65°		22957.7	22685.0	22491.8	26548.6	22403.4	22354.1	22699.2	22459.3	22332.6	26572.2	22544.9	22594.8
70°		22122.4	21582.8	21015.2	24793.9	20873.2	21147.0	21725.2	21264.3	20771.8	24793.9	21055.7	21415.3
75°		21089.0	20332.1	19186.7	22294.8	18963.9	19873.8	20676.3	19950.1	18858.3	22260.9	19227.6	20236.7
80°		20255.5	19178.7	17159.2	18789.5	16736.1	18708.9	19652.3	18686.5	16718.5	18718.2	17023.0	19089.2
85°		19598.5	18407.1	15102.1	13872.5	14727.7	17711.3	19047.5	17869.6	14606.9	13713.7	15063.1	18131.3

Lichttechnischer Prüfbefund

Familie Licross® 21 Opal	Bestell-Nr.: 52TL1DDN4E5M EAN: 4058352049952	LP-Nummer 59520_3
---	---	------------------------------------

Leuchtdichten in cd/m² γ 65° γ 70° γ 75° γ 80° γ 85° **siteco**



Lichttechnischer Prüfbefund

Familie Licross® 21 Opal	Bestell-Nr.: 52TL1DDN4E5M EAN: 4058352049952	LP-Nummer 59520_3
------------------------------------	---	------------------------------------

Dimmstufen-Tabelle	Umgebungstemperatur: 25°C	sITeco
---------------------------	---------------------------	---------------

Lichtstrom [%]	Dimmstufe linear	Dimmstufe logarithmisch	Lichtstrom [lm]	Systemleistung [W]
100	254	254	14560	84.6
95	240	252	13829	80.0
90	226	250	13088	75.2
85	213	248	12395	71.0
80	199	245	11638	66.3
75	186	243	10923	62.0
70	173	240	10204	57.8
65	160	237	9475	53.6
60	147	234	8742	49.3
55	134	231	8001	45.1
50	122	227	7307	41.2
45	109	223	6553	37.1
40	97	219	5851	33.2
35	84	213	5079	29.1
30	72	208	4365	25.4
25	60	201	3645	21.6
20	48	193	2918	17.8
15	36	182	2188	14.0
10	24	168	1454	10.2
5	12	142	712	6.5
1	4	102	217	4.1