
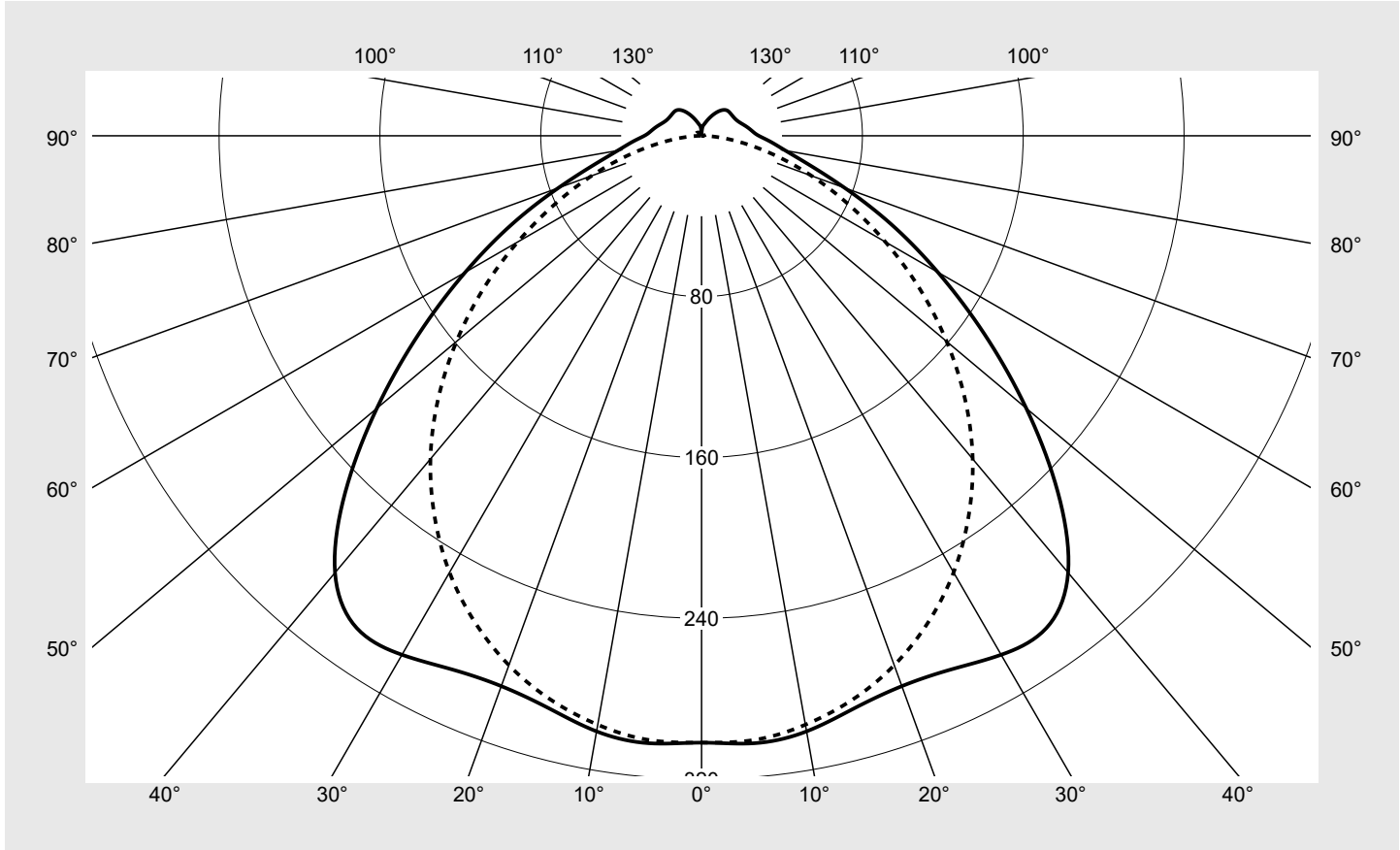


# Photometric test report

<b>Family</b> <b>Modario® 31</b> 	<b>Order number: 53BM812D2V4120</b> <b>EAN: 4058352421857</b>	<b>LP number</b> <b>59064_4</b>
	<b>Version</b> diffuser optic, frosted, wide distribution <b>Lamps</b> LED 4000 K   CRI ≥ 80 <b>Controlgear</b> ECG-DALI <b>Rated values</b> Net luminous flux = 12350 lm Power consumption = 79.5 W Luminous efficacy = 155.3 lm/W	<b>serial documentation</b> <b>01.09.2020</b>

**Luminous intensity in cd/klm**    **C180-0**    **C270-90**    **Imax: 303 cd/klm**



Classifications	
DIN 5040	A 4 1
CIE	N1=47 N2=80 N3=95 N4=92 N5=100

Luminaire light output ratios	
$\eta_{LB}$	100.0%
$\phi_u$	92.2%
$\phi_o$	7.8%

Measurement conditions
DIN EN 13032 and DIN 5032

## Photometric test report

<b>Family</b> <b>Modario® 31</b>	<b>Order number: 53BM812D2V4120</b> <b>EAN: 4058352421857</b>	<b>LP number</b> <b>59064_4</b>
<b>Table of values for luminous intensities</b>		<b>Maximum luminous intensity</b>
		<b>siteco</b>

C-planes γ	0° 180°	15°	30°	45°	60°	75°	90° 270°	Phi-zone	Total Phi-zone
		165° 195° 345°	150° 210° 330°	135° 225° 315°	120° 240° 300°	105° 255° 285°			
Luminous intensity in cd/klm							Luminous flux in lm/klm		
0°	301.8	301.8	301.8	301.8	301.8	301.8	301.8	1.8	1.8
5°	303.3	302.1	299.9	300.9	301.9	301.5	301.6	14.4	16.2
10°	300.8	300.0	297.7	298.5	298.9	297.8	297.4	28.4	44.6
15°	294.6	294.3	291.7	292.6	293.1	291.2	290.3	41.5	86.1
20°	291.3	290.6	285.8	284.4	284.3	281.8	280.2	53.5	139.7
25°	293.0	291.5	283.0	276.7	273.3	269.6	266.9	64.6	204.3
30°	298.0	296.0	283.3	270.8	261.1	254.6	250.8	74.9	279.2
35°	299.0	297.5	283.8	265.6	248.4	237.0	231.5	83.7	362.9
40°	283.7	284.3	276.5	258.3	235.0	217.5	209.8	89.2	452.1
45°	250.6	253.6	254.2	243.8	219.3	195.5	185.4	89.4	541.5
50°	210.8	214.1	220.0	218.9	199.3	171.7	159.1	84.6	626.1
55°	171.6	174.1	180.5	185.1	173.7	146.4	132.4	75.7	701.8
60°	135.7	137.3	141.6	147.2	142.6	119.7	105.6	64.0	765.8
65°	104.1	104.9	107.1	111.0	110.3	93.2	80.6	51.2	817.1
70°	75.8	76.7	78.0	80.6	80.3	68.4	58.2	38.7	855.8
75°	55.2	55.4	55.7	57.0	55.4	46.3	38.3	27.9	883.7
80°	42.4	41.9	40.8	39.2	35.6	27.7	21.5	19.5	903.3
85°	34.5	33.8	31.7	27.6	21.5	14.0	8.7	13.7	916.9
90°	28.5	27.9	25.4	20.0	13.0	5.8	0.8	9.7	926.7
95°	25.4	25.0	22.9	18.2	11.9	5.4	1.1	8.8	935.5
100°	23.4	22.9	21.0	17.1	11.6	5.5	1.7	8.2	943.6
105°	21.5	21.0	19.3	16.3	11.6	5.8	2.4	7.6	951.2
110°	19.9	19.3	18.1	15.8	11.8	6.2	2.9	7.1	958.3
115°	18.9	18.4	17.5	15.6	12.1	6.5	2.9	6.7	965.0
120°	18.5	17.9	17.3	15.6	12.2	6.6	2.9	6.3	971.4
125°	18.2	17.7	17.1	15.5	11.7	6.5	2.7	5.9	977.3
130°	18.1	17.6	16.9	14.9	10.9	6.2	2.5	5.4	982.6
135°	17.9	17.2	16.1	13.6	9.8	5.6	2.4	4.7	987.3
140°	16.8	15.9	14.5	12.0	8.4	5.0	2.2	3.8	991.1
145°	14.9	14.0	12.6	10.1	6.9	4.5	2.0	3.0	994.1
150°	12.5	11.8	10.5	8.0	5.7	4.2	1.8	2.2	996.3
155°	10.2	9.6	8.4	6.3	5.0	3.7	1.6	1.5	997.8
160°	8.1	7.7	6.3	5.1	4.6	3.6	1.5	1.0	998.8
165°	6.4	6.2	4.7	4.5	4.1	4.7	1.5	0.7	999.5
170°	5.4	4.4	3.9	4.0	3.9	3.8	1.5	0.4	999.8
175°	3.9	3.2	4.4	4.7	3.9	2.2	1.5	0.2	1000.0
180°	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.0	1000.0

## Photometric test report

<b>Family</b> <b>Modario® 31</b>	<b>Order number: 53BM812D2V4120</b> <b>EAN: 4058352421857</b>	<b>LP number</b> <b>59064_4</b>
-------------------------------------	--	------------------------------------

<b>UGR-Table</b>	<b>Standard room</b>	<b>siteco</b>
------------------	----------------------	---------------

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	23.5	25.2	23.9	25.5	25.8	23.3	25.0	23.7	25.3	25.6
	3H	24.5	26.0	24.9	26.4	26.7	24.5	26.0	24.8	26.3	26.7
	4H	24.9	26.3	25.3	26.6	27.0	24.9	26.3	25.3	26.7	27.0
	6H	25.2	26.5	25.6	26.9	27.3	25.2	26.5	25.6	26.9	27.3
	8H	25.4	26.6	25.8	27.0	27.4	25.3	26.5	25.7	26.9	27.3
	12H	25.6	26.7	26.0	27.1	27.5	25.3	26.5	25.7	26.9	27.3
4H	2H	24.2	25.6	24.6	26.0	26.3	24.1	25.5	24.4	25.8	26.2
	3H	25.3	26.5	25.7	26.9	27.3	25.4	26.6	25.8	27.0	27.4
	4H	25.8	26.9	26.2	27.3	27.7	25.9	27.0	26.4	27.4	27.9
	6H	26.2	27.2	26.7	27.6	28.1	26.3	27.3	26.7	27.7	28.2
	8H	26.4	27.3	26.9	27.8	28.2	26.4	27.3	26.9	27.8	28.2
	12H	26.7	27.5	27.2	27.9	28.4	26.5	27.3	27.0	27.8	28.2
8H	4H	26.0	26.9	26.5	27.4	27.8	26.2	27.1	26.7	27.5	28.0
	6H	26.6	27.4	27.1	27.8	28.3	26.7	27.4	27.2	27.9	28.4
	8H	26.9	27.6	27.4	28.1	28.6	26.9	27.5	27.4	28.0	28.5
	12H	27.3	27.8	27.8	28.3	28.9	27.0	27.6	27.5	28.1	28.6
12H	4H	26.1	26.9	26.6	27.3	27.8	26.2	27.0	26.7	27.5	28.0
	6H	26.7	27.3	27.2	27.8	28.3	26.8	27.4	27.3	27.9	28.4
	8H	27.0	27.6	27.5	28.1	28.6	27.0	27.6	27.5	28.1	28.6

<b>Luminance table</b>	<b>Max. for <math>\gamma \geq 65^\circ</math></b>	<b>Photometric dimensions in mm:</b>	<b>L = 1476</b>	<b>H(C0) = 25</b>	<b>H(C180) = 25</b>
			<b>B = 75</b>	<b>H(C90) = 0</b>	<b>H(C270) = 0</b>

C-planes	$\gamma$	Luminance in cd/m <sup>2</sup>							
		0° 180°	15° 165° 195° 345°	30° 150° 210° 330°	45° 135° 225° 315°	60° 120° 240° 300°	75° 105° 255° 285°	90° 270°	
45°		29657.5	30260.9	31115.8	31127.8	29658.8	28390.2	29246.6	
50°		26190.7	26855.7	28403.2	29663.0	28861.8	27021.9	27620.5	
55°		22614.9	23199.7	24859.6	26934.6	27284.3	25348.5	25742.8	
60°		19199.8	19664.3	21061.9	23325.2	24687.8	23242.2	23562.7	
65°		16017.8	16385.1	17460.9	19472.0	21441.1	20771.1	21267.0	
70°		12904.7	13269.6	14181.7	15965.6	17971.6	18041.6	18982.5	
75°		10595.9	10846.7	11551.2	13064.2	14723.2	15089.8	16515.1	
80°		9414.6	9525.8	9951.4	10789.8	11767.2	11937.9	13788.6	
85°		9188.3	9249.5	9424.1	9547.4	9451.6	9003.6	11115.9	

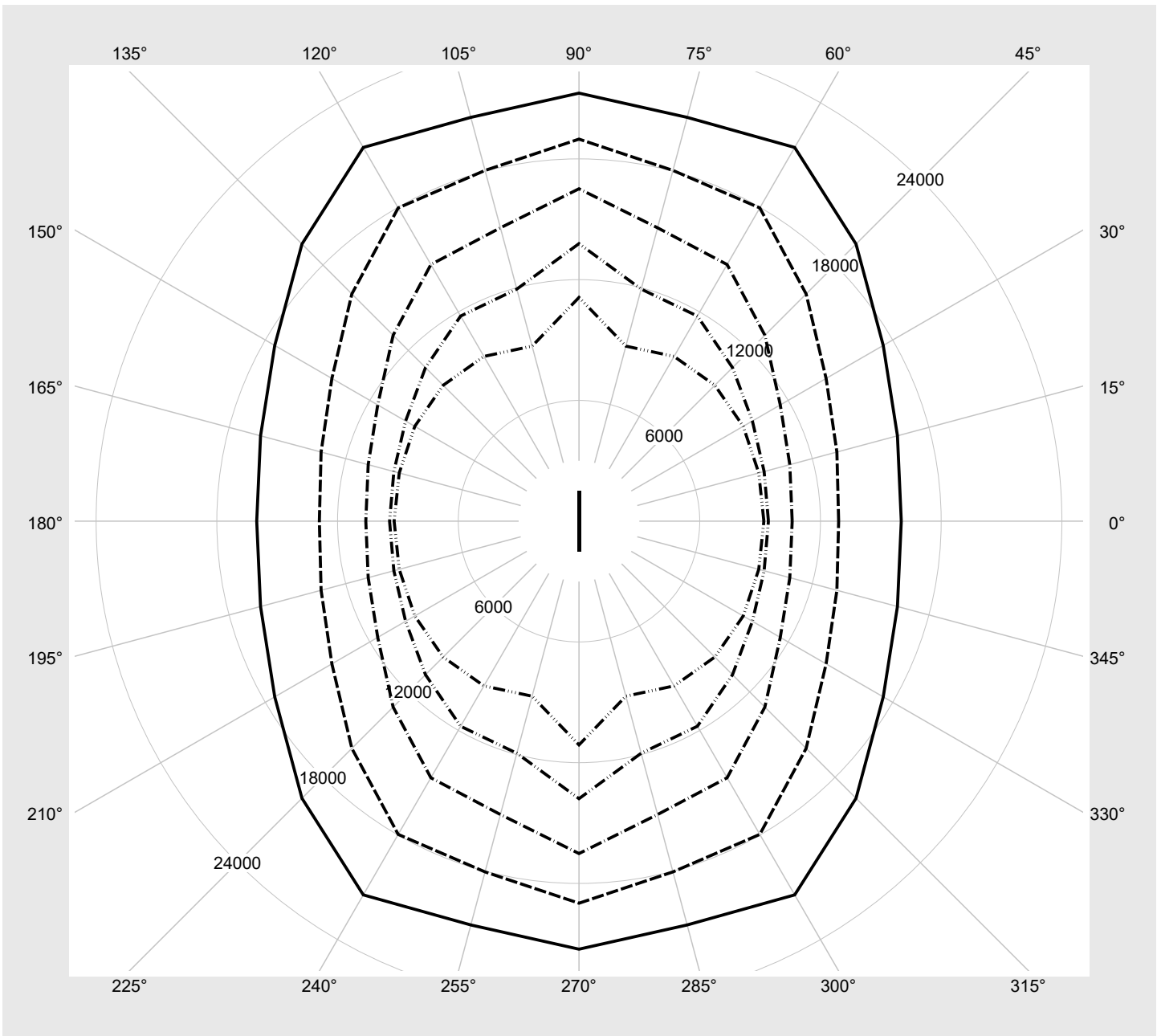
**Photometric test report**

<b>Family</b> <b>Modario® 31</b>	<b>Order number: 53BM812D2V4120</b> <b>EAN: 4058352421857</b>	<b>LP number</b> <b>59064_4</b>
-------------------------------------	--	------------------------------------



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

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



## Photometric test report

Family <b>Modario® 31</b>	Order number: <b>53BM812D2V4120</b> EAN: <b>4058352421857</b>	LP number <b>59064_4</b>
------------------------------	--	-----------------------------

<b>Dimming levels table</b>	environmental temperature: 25°C	<b>sITeco</b>
-----------------------------	---------------------------------	---------------

Luminous flux %	Dimming level linear	Dimming level logarithmic	Luminous flux [lm]	Power consumption [W]
100	254	254	12350	79.5
95	239	252	11712	74.7
90	225	250	11101	70.1
85	211	247	10482	65.7
80	198	245	9900	61.6
75	184	242	9262	57.3
70	171	240	8649	53.2
65	158	237	8034	49.2
60	145	233	7414	45.2
55	132	230	6781	41.3
50	120	227	6189	37.6
45	107	222	5543	33.7
40	95	218	4937	30.2
35	83	213	4324	26.6
30	71	207	3703	23.0
25	59	201	3085	19.6
20	47	192	2458	16.1
15	36	182	1877	12.9
10	24	168	1240	9.4
5	12	142	603	6.0
3	7	122	343	4.5