

## Photometric test report

Family  
**Modario® 31**

Order number: **53BM813D2V4085**  
EAN: **4058352453209**

LP number  
**55864\_39**



**Version** diffuser optic, frosted, extremely narrow distribution  
**Lamps** LED 4000 K | CRI ≥ 80  
**Controlgear** ECG-DALI  
**Rated values** Net luminous flux = 8770 lm  
Power consumption = 61.8 W  
Luminous efficacy = 141.9 lm/W

serial  
documentation  
26.11.2021

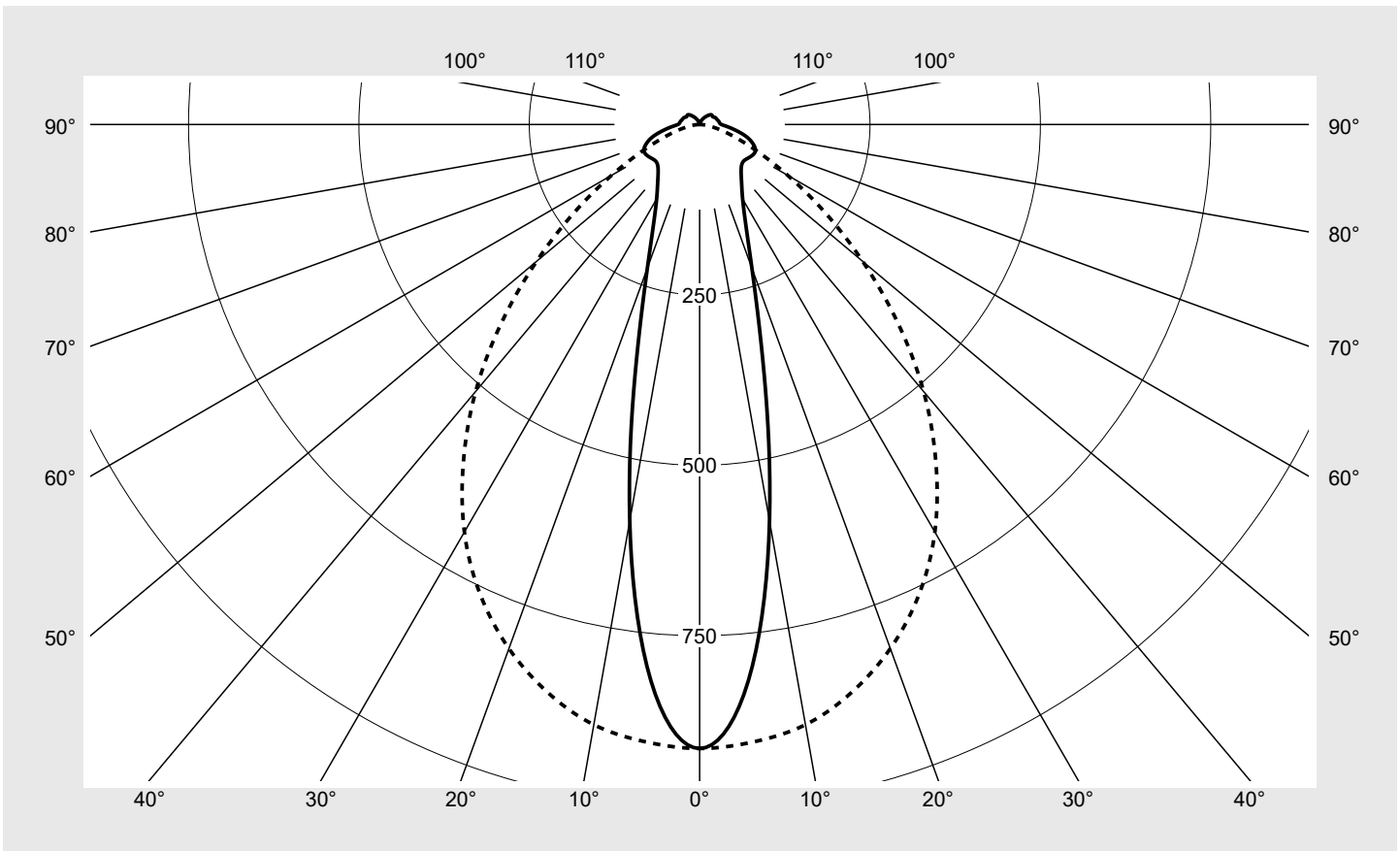
sitEco

Luminous intensity in cd/klm

C180-0

C270-90

Imax: 915 cd/klm



### Classifications

DIN 5040 A 5 1  
CIE N1=62 N2=83 N3=94  
N4=92 N5=100

### Luminaire light output ratios

$\eta_{LB}$  100.0%  
 $\phi_u$  91.5%  
 $\phi_o$  8.5%

### Measurement conditions

DIN EN 13032 and DIN 5032

## Photometric test report

<b>Family</b> <b>Modario® 31</b>	<b>Order number: 53BM813D2V4085</b> <b>EAN: 4058352453209</b>	<b>LP number</b> <b>55864_39</b>
<b>Table of values for luminous intensities</b>		<b>Maximum luminous intensity</b>
		<b>sITeco</b>

C-planes $\gamma$	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°	915.5	915.5	915.5	915.5	915.5	915.5	915.5	5.5	5.5
5°	819.5	825.1	832.3	860.4	886.8	904.6	909.2	41.2	46.7
10°	590.6	607.1	648.0	721.7	805.5	867.1	894.2	69.7	116.3
15°	358.4	377.7	428.3	533.4	678.6	807.9	862.4	81.2	197.6
20°	224.3	237.2	273.7	366.7	536.1	730.4	818.2	83.3	280.9
25°	159.5	166.0	188.1	251.8	404.9	637.9	761.3	81.4	362.3
30°	126.2	130.1	141.6	181.4	299.0	538.0	690.4	77.6	439.9
35°	107.6	109.0	114.6	137.4	220.1	437.8	604.4	72.0	511.9
40°	94.8	95.1	98.0	109.1	166.6	347.2	511.3	65.7	577.6
45°	86.7	85.9	86.0	92.0	129.2	268.8	411.0	58.8	636.5
50°	84.0	82.1	78.9	79.1	101.9	202.0	312.3	51.9	688.4
55°	86.3	83.8	77.3	71.6	83.0	150.4	223.9	46.5	734.9
60°	89.8	87.1	79.4	68.3	68.5	108.2	149.5	42.0	776.9
65°	90.3	87.9	79.4	65.8	58.2	76.4	93.9	38.1	815.0
70°	83.5	81.8	73.4	60.1	48.2	52.2	56.9	33.1	848.1
75°	72.1	70.7	63.0	50.5	37.4	33.6	33.1	27.2	875.3
80°	56.4	55.2	49.4	38.5	26.5	19.6	17.0	20.3	895.6
85°	42.1	40.9	36.8	28.1	17.8	10.3	6.9	14.4	910.0
90°	32.0	31.0	27.4	20.9	12.6	4.9	0.8	10.3	920.4
95°	29.3	28.4	25.5	20.9	13.0	5.0	0.9	9.8	930.2
100°	28.2	27.4	25.5	22.2	14.1	5.5	0.9	9.8	940.0
105°	26.8	26.3	25.8	23.4	14.6	5.9	0.9	9.7	949.7
110°	25.9	25.4	25.1	22.3	14.3	6.0	0.8	9.1	958.8
115°	24.6	23.6	22.7	20.4	13.5	5.8	0.8	8.2	967.0
120°	22.5	21.9	21.4	19.0	12.2	4.9	0.8	7.2	974.2
125°	22.6	22.1	21.0	17.0	10.5	4.3	0.9	6.5	980.7
130°	22.2	21.2	18.9	14.4	9.0	4.0	1.1	5.5	986.2
135°	19.6	18.2	15.8	12.0	6.9	3.8	1.2	4.3	990.6
140°	16.0	15.0	12.9	9.8	5.6	3.5	1.3	3.3	993.8
145°	12.7	11.9	10.4	7.4	4.5	3.2	1.4	2.3	996.2
150°	9.7	9.0	7.7	5.4	3.9	2.8	1.5	1.6	997.7
155°	6.7	6.4	5.6	4.2	3.5	2.1	1.5	1.0	998.7
160°	5.1	4.9	4.1	3.6	3.2	1.5	1.4	0.6	999.4
165°	4.0	3.8	3.2	3.1	2.5	1.4	1.4	0.4	999.8
170°	3.1	2.8	2.6	2.2	1.4	1.4	1.4	0.2	1000.0
175°	1.3	1.3	1.3	1.4	1.4	1.4	1.4	0.1	1000.0
180°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	1000.0

## Photometric test report

<b>Family</b> <b>Modario® 31</b>	<b>Order number: 53BM813D2V4085</b> <b>EAN: 4058352453209</b>	<b>LP number</b> <b>55864_39</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	17.9	19.4	18.2	19.7	20.0	22.8	24.3	23.1	24.6	24.9
	3H	20.7	22.1	21.1	22.5	22.8	23.6	24.9	24.0	25.3	25.6
	4H	22.0	23.3	22.4	23.6	24.0	23.8	25.1	24.2	25.4	25.8
	6H	22.9	24.2	23.4	24.5	24.9	24.0	25.1	24.4	25.5	25.9
	8H	23.4	24.5	23.8	24.9	25.3	24.1	25.1	24.5	25.5	25.9
	12H	23.7	24.8	24.2	25.2	25.6	24.1	25.1	24.6	25.5	25.9
4H	2H	18.8	20.0	19.2	20.4	20.8	22.8	24.1	23.2	24.5	24.8
	3H	21.8	22.9	22.2	23.3	23.7	23.7	24.8	24.2	25.2	25.6
	4H	23.1	24.1	23.6	24.5	25.0	24.1	25.1	24.5	25.5	25.9
	6H	24.3	25.2	24.7	25.6	26.1	24.3	25.2	24.8	25.6	26.1
	8H	24.8	25.6	25.2	26.0	26.5	24.4	25.2	24.9	25.6	26.1
	12H	25.2	25.9	25.7	26.4	26.9	24.5	25.2	25.0	25.6	26.1
8H	4H	23.5	24.3	24.0	24.7	25.2	24.3	25.1	24.8	25.6	26.0
	6H	24.8	25.5	25.3	26.0	26.5	24.6	25.3	25.1	25.8	26.3
	8H	25.4	26.0	25.9	26.5	27.0	24.8	25.4	25.3	25.8	26.4
	12H	26.0	26.5	26.5	27.0	27.5	24.9	25.4	25.4	25.9	26.4
12H	4H	23.5	24.2	24.0	24.7	25.2	24.4	25.1	24.8	25.5	26.0
	6H	24.9	25.5	25.4	26.0	26.5	24.8	25.3	25.3	25.8	26.3
	8H	25.6	26.1	26.1	26.6	27.1	24.9	25.4	25.4	25.9	26.5

<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°		7287.1	7279.0	7474.4	8339.7	12406.8	27727.0	46052.9	
50°		7406.2	7316.3	7233.4	7614.4	10480.8	22578.6	38491.4	
55°		8077.4	7925.9	7559.8	7398.6	9258.2	18490.8	30924.8	
60°		9018.9	8863.7	8387.5	7686.7	8423.6	14912.2	23681.1	
65°		9868.0	9751.6	9187.3	8195.2	8039.0	12083.9	17595.9	
70°		10097.9	10054.4	9486.1	8452.9	7662.0	9765.8	13183.6	
75°		9831.1	9827.1	9282.4	8229.4	7053.2	7788.0	10122.9	
80°		8895.3	8911.9	8549.3	7515.2	6210.3	6001.8	7778.2	
85°		7950.6	7937.3	7780.8	6903.1	5583.7	4733.7	6310.2	

**Photometric test report**

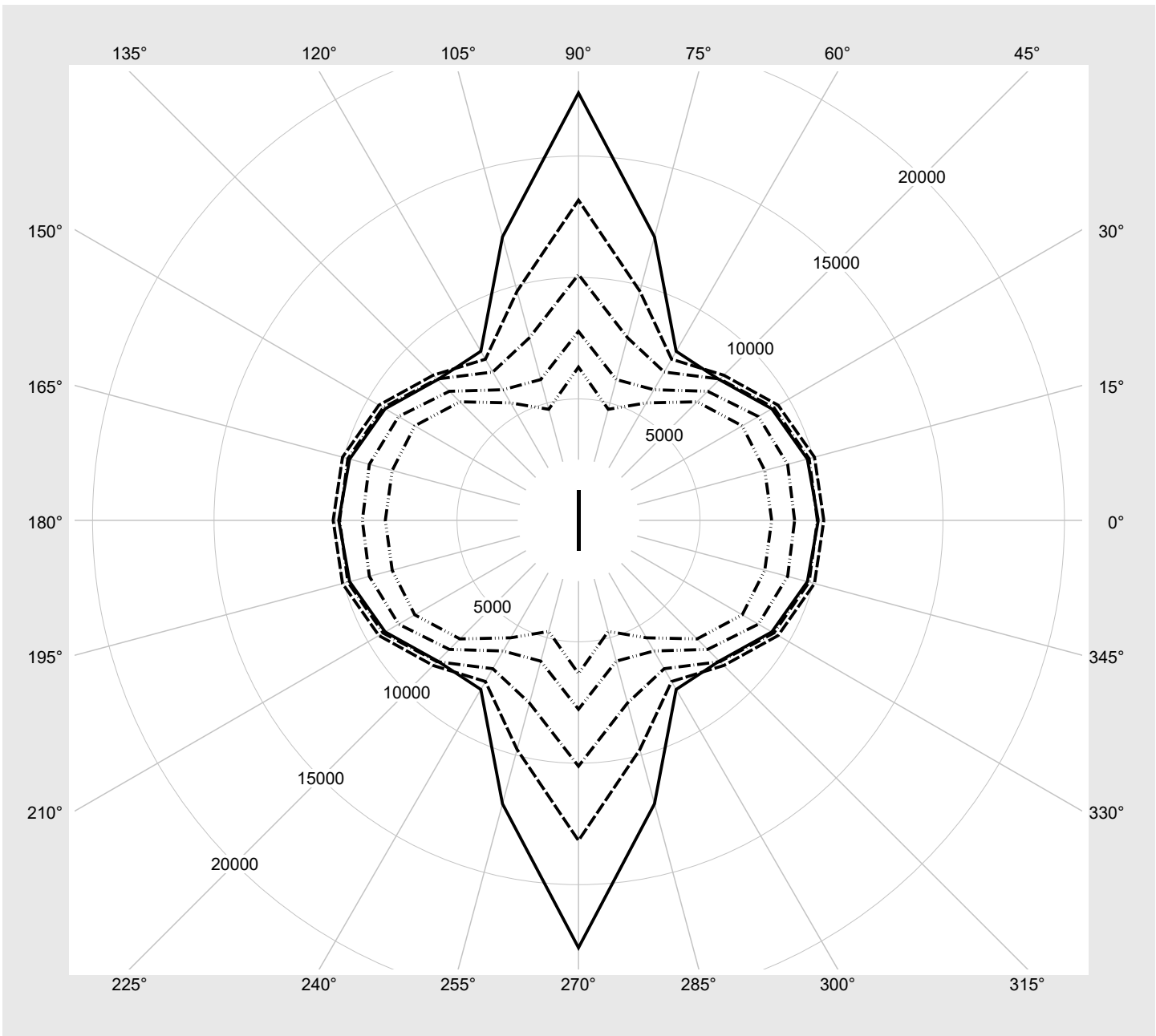
**Family**  
**Modario® 31**

**Order number: 53BM813D2V4085**  
**EAN: 4058352453209**

**LP number**  
**55864\_39**

**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>53BM813D2V4085</b> EAN: <b>4058352453209</b>	LP number <b>55864_39</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	8770	61.8
95	239	252	8326	58.0
90	225	250	7902	54.4
85	211	247	7471	50.9
80	197	245	7025	47.4
75	183	242	6574	43.9
70	170	239	6146	40.8
65	157	236	5711	37.6
60	144	233	5271	34.4
55	131	230	4825	31.4
50	118	226	4371	28.3
45	106	222	3947	25.6
40	94	218	3519	22.8
35	82	213	3084	20.1
30	70	207	2645	17.4
25	58	200	2202	14.8
20	46	191	1755	12.0
15	34	180	1302	9.4
10	23	166	884	7.0
5	11	139	425	4.6
2	4	102	154	2.9