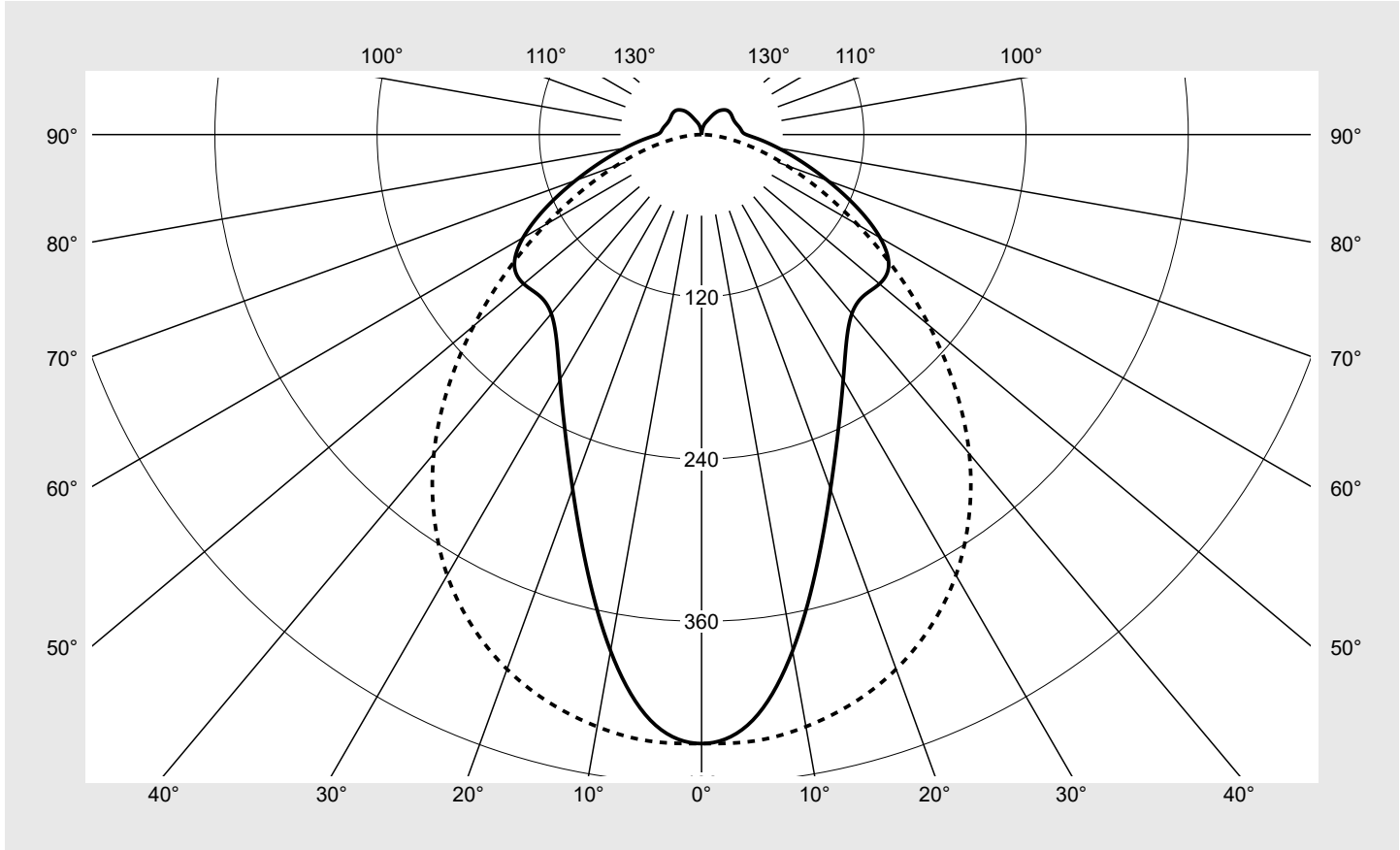


# Photometric test report

<b>Family</b> <b>Modario® 31</b> 	<b>Order number: 53BM811DV4D5D2</b> <b>EAN: 4069025123015</b>	<b>LP number</b> <b>59593_3</b>
	<b>Version</b> diffuser optic, frosted, narrow distribution <b>Lamps</b> LED 4000 K   CRI ≥ 80 <b>Controlgear</b> ECG-DALI <b>Rated values</b> Net luminous flux = 13680 lm Power consumption = 74.9 W Luminous efficacy = 182.6 lm/W	<b>serial documentation</b> <b>02.05.2024</b>

**Luminous intensity in cd/klm**    **C180-0**    **C270-90**    **Imax: 450 cd/klm**



Classifications	
DIN 5040	A 4 1
CIE	N1=50 N2=78 N3=94 N4=90 N5=100

Luminaire light output ratios	
$\eta_{LB}$	100.0%
$\phi_u$	90.4%
$\phi_o$	9.6%

**Measurement conditions**  
 DIN EN 13032 and DIN 5032

## Photometric test report

<b>Family</b> <b>Modario® 31</b>	<b>Order number: 53BM811DV4D5D2</b> <b>EAN: 4069025123015</b>	<b>LP number</b> <b>59593_3</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°	450.4	450.4	450.4	450.4	450.4	450.4	450.4	2.7	2.7
5°	434.8	434.4	434.2	439.8	445.7	448.7	450.2	21.1	23.8
10°	387.7	390.2	396.4	411.2	428.2	439.8	444.6	39.4	63.1
15°	329.8	334.4	345.9	370.2	400.2	424.7	434.9	53.4	116.5
20°	278.9	283.9	296.1	324.2	364.7	403.3	420.8	63.2	179.7
25°	239.6	243.9	253.6	279.8	325.0	376.1	401.3	69.5	249.1
30°	209.6	212.8	219.1	240.3	283.9	343.6	376.3	72.7	321.9
35°	186.9	188.8	191.5	205.8	243.8	306.6	344.9	73.5	395.4
40°	173.0	173.1	171.1	177.5	207.0	267.1	308.1	72.6	468.0
45°	169.1	166.9	158.6	155.4	174.1	225.8	265.4	70.9	538.9
50°	171.8	167.4	153.3	140.0	146.6	186.3	219.9	69.2	608.2
55°	169.0	164.3	148.2	128.3	123.8	150.1	175.1	66.4	674.5
60°	152.5	148.9	135.5	115.0	103.6	117.6	133.2	60.4	734.9
65°	126.3	124.1	114.5	97.6	84.4	89.2	96.9	51.5	786.4
70°	99.0	97.7	90.6	78.2	65.9	64.8	67.1	41.2	827.6
75°	76.1	75.0	69.7	60.3	49.1	44.1	43.1	31.6	859.2
80°	57.7	56.8	53.2	44.9	34.6	27.3	24.1	23.2	882.4
85°	43.5	42.6	39.5	32.5	22.9	14.7	10.1	16.3	898.6
90°	33.0	32.1	28.8	22.5	14.4	6.3	0.8	11.1	909.7
95°	29.9	28.9	25.8	20.4	13.4	6.1	0.9	10.0	919.7
100°	28.7	27.7	24.5	19.6	13.4	6.3	0.9	9.6	929.3
105°	27.4	26.4	23.6	19.5	13.7	6.7	0.8	9.2	938.4
110°	26.5	25.4	23.3	19.7	14.2	7.2	0.7	8.9	947.3
115°	26.1	25.1	23.5	20.2	14.6	6.8	0.8	8.6	955.9
120°	26.2	25.3	23.9	20.5	14.8	6.4	0.8	8.3	964.2
125°	26.5	25.6	24.0	20.4	14.4	6.3	0.8	7.8	972.0
130°	26.5	25.4	23.5	19.6	12.9	6.2	0.9	7.1	979.0
135°	25.6	24.4	22.2	18.2	10.9	5.6	1.1	6.1	985.2
140°	23.7	22.4	20.1	15.4	9.4	4.6	1.1	4.9	990.1
145°	21.0	19.8	17.0	12.1	7.6	3.5	1.3	3.7	993.8
150°	16.9	15.5	12.9	9.4	6.3	2.5	1.3	2.5	996.4
155°	12.6	11.7	10.1	7.4	5.2	1.9	1.4	1.7	998.0
160°	9.9	9.3	7.5	5.7	3.8	1.6	1.4	1.0	999.1
165°	7.7	7.3	5.1	4.1	2.4	1.5	1.4	0.6	999.7
170°	4.8	3.7	2.7	2.3	1.6	1.5	1.5	0.2	999.9
175°	1.6	1.5	1.5	1.5	1.5	1.5	1.5	0.1	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> Modario® 31	<b>Order number: 53BM811DV4D5D2</b> <b>EAN: 4069025123015</b>	<b>LP number</b> 59593_3
------------------------------	--	-----------------------------

<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	23.2	24.8	23.5	25.1	25.5	23.7	25.3	24.0	25.7	26.0
	3H	24.9	26.4	25.3	26.8	27.1	24.9	26.4	25.3	26.7	27.1
	4H	25.6	27.0	26.0	27.4	27.8	25.4	26.8	25.8	27.1	27.5
	6H	26.2	27.5	26.6	27.9	28.3	25.7	27.0	26.1	27.4	27.7
	8H	26.5	27.7	26.9	28.1	28.5	25.8	27.0	26.2	27.4	27.8
	12H	26.7	27.9	27.1	28.3	28.7	25.9	27.0	26.3	27.4	27.8
4H	2H	23.8	25.2	24.2	25.6	25.9	24.2	25.6	24.6	25.9	26.3
	3H	25.7	26.9	26.2	27.3	27.7	25.5	26.7	25.9	27.1	27.5
	4H	26.6	27.7	27.0	28.1	28.5	26.1	27.2	26.5	27.6	28.0
	6H	27.3	28.3	27.8	28.7	29.1	26.5	27.5	27.0	27.9	28.4
	8H	27.6	28.5	28.1	29.0	29.4	26.7	27.5	27.1	28.0	28.5
	12H	28.0	28.7	28.4	29.2	29.7	26.8	27.6	27.3	28.0	28.5
8H	4H	26.8	27.7	27.3	28.2	28.6	26.4	27.3	26.9	27.7	28.2
	6H	27.7	28.5	28.2	28.9	29.4	27.0	27.7	27.4	28.2	28.7
	8H	28.2	28.8	28.7	29.3	29.8	27.2	27.8	27.7	28.3	28.8
	12H	28.6	29.2	29.1	29.7	30.2	27.3	27.9	27.8	28.4	28.9
12H	4H	26.9	27.7	27.4	28.1	28.6	26.5	27.3	27.0	27.7	28.2
	6H	27.8	28.5	28.3	29.0	29.5	27.1	27.7	27.6	28.2	28.7
	8H	28.3	28.9	28.8	29.4	29.9	27.3	27.9	27.8	28.4	28.9

<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°		22161.0	22057.5	21508.5	21983.2	26075.5	36332.4	46376.8	
50°		23632.8	23262.8	21924.4	21014.2	23509.6	32483.6	42274.5	
55°		24665.6	24250.5	22615.7	20673.0	21550.9	28790.7	37719.1	
60°		23887.7	23633.0	22321.8	20186.2	19870.2	25277.1	32929.6	
65°		21533.4	21469.4	20672.9	18958.3	18187.9	22008.6	28340.2	
70°		18678.3	18727.2	18248.7	17151.7	16328.8	18922.0	24258.7	
75°		16183.9	16272.4	16024.9	15311.4	14449.0	15944.8	20560.6	
80°		14216.2	14307.3	14349.6	13665.8	12659.1	13066.8	17118.1	
85°		12817.0	12910.7	13039.9	12461.3	11157.1	10514.4	14258.3	

**Photometric test report**

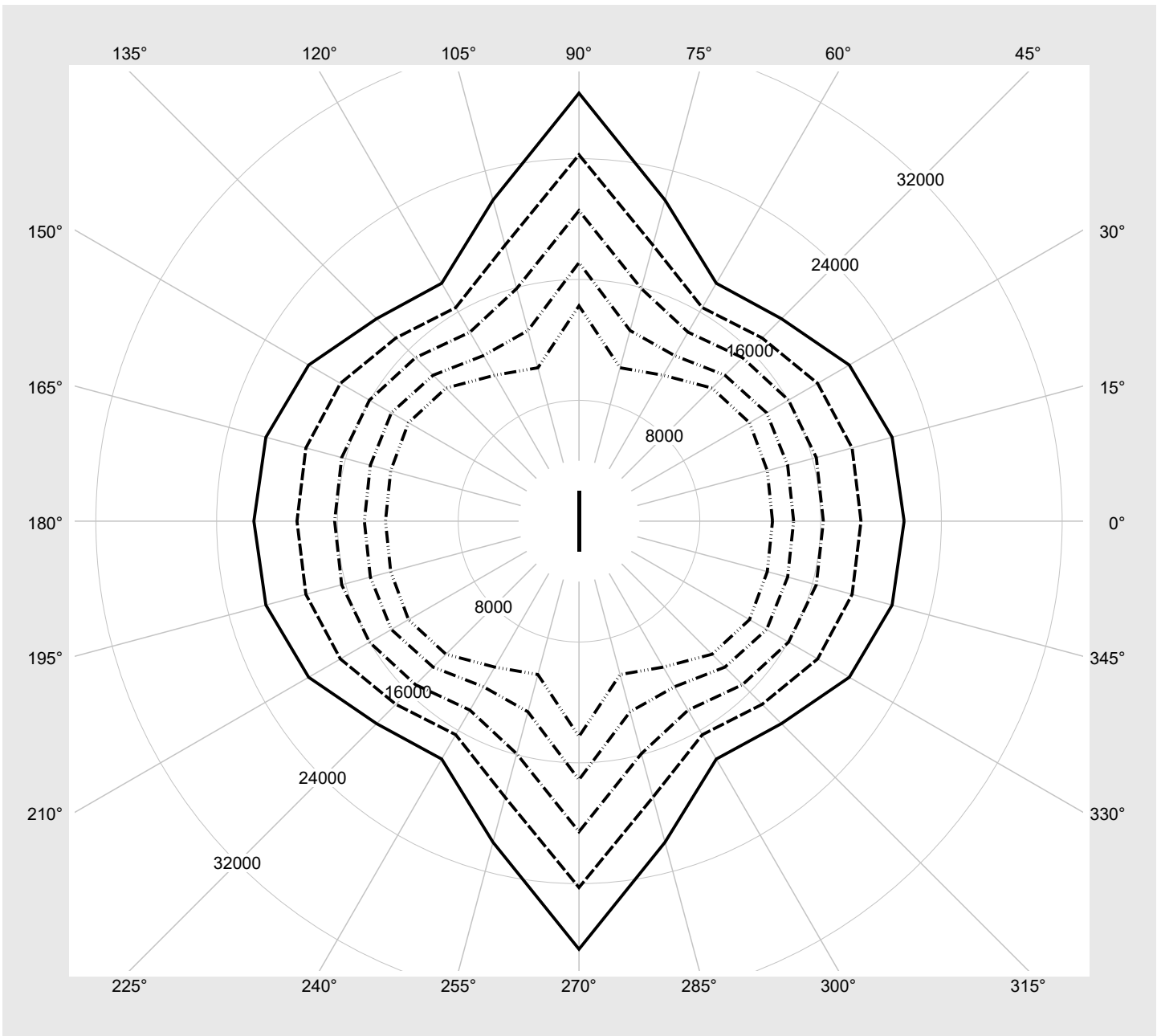
**Family**  
**Modario® 31**

**Order number: 53BM811DV4D5D2**  
**EAN: 4069025123015**

**LP number**  
**59593\_3**

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

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



## Photometric test report

<b>Family</b> <b>Modario® 31</b>	<b>Order number: 53BM811DV4D5D2</b> <b>EAN: 4069025123015</b>	<b>LP number</b> <b>59593_3</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	13680	74.9
95	240	252	12972	70.7
90	227	250	12308	67.0
85	214	248	11640	63.2
80	201	245	10966	59.3
75	187	243	10234	55.4
70	174	240	9551	51.6
65	162	238	8913	48.2
60	149	234	8220	44.5
55	136	231	7522	40.8
50	123	227	6821	37.1
45	111	224	6168	33.6
40	98	219	5457	30.0
35	86	214	4797	26.6
30	73	208	4078	23.0
25	61	202	3411	19.8
20	49	194	2740	16.4
15	37	183	2066	13.0
10	25	169	1389	9.7
5	13	145	708	6.4
2	5	110	253	4.2