
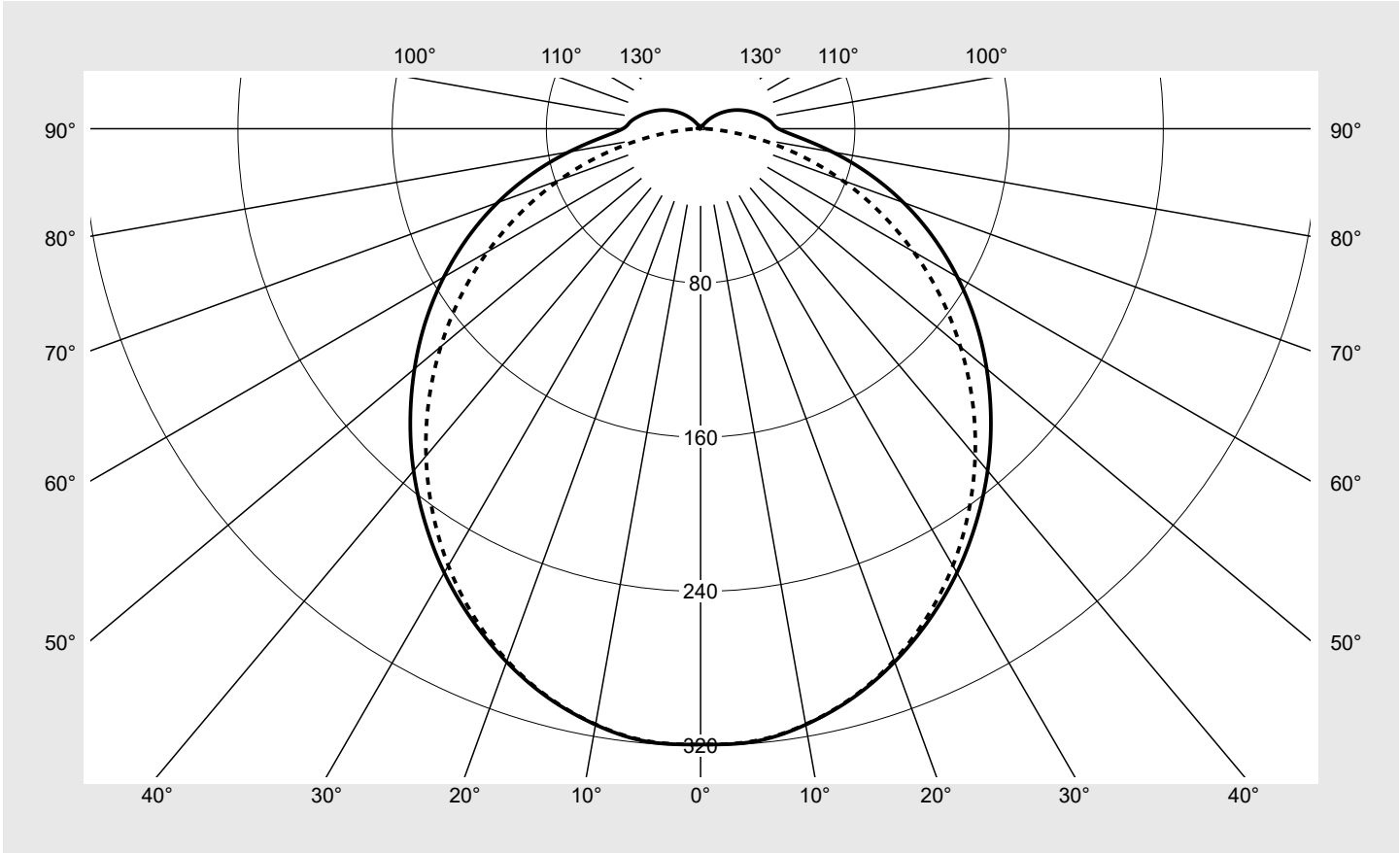


# Photometric test report

<b>Family</b> <b>Monsun® 21</b>	<b>Order number: 51FB20FP430C</b> <b>EAN: 4069025178466</b>	<b>LP number</b> <b>59060_128</b>
	<b>Version</b> prismatic diffuser, opal, polycarbonate, extremely wide distribution <b>Lamps</b> LED 4000 K   CRI ≥ 80 <b>Controlgear</b> ECG <b>Rated values</b> Net luminous flux = 3000 lm Power consumption = 18.9 W Luminous efficacy = 158.7 lm/W	<b>serial documentation</b> <b>08.05.2024</b>
		

Luminous intensity in cd/klm C180-0 C270-90 **Imax: 319 cd/klm**



Classifications	
DIN 5040	A 4 1
CIE	N1=45 N2=75 N3=93 N4=94 N5=100

Luminaire light output ratios	
$\eta_{LB}$	100.0%
$\phi_u$	93.7%
$\phi_o$	6.3%

Measurement conditions
DIN EN 13032 and DIN 5032

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<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°	319.4	319.4	319.4	319.4	319.4	319.4	319.4	1.9	1.9
5°	319.1	317.8	316.0	317.2	318.6	318.6	318.8	15.2	17.1
10°	313.9	312.8	311.0	312.1	313.5	313.5	313.7	29.8	46.9
15°	305.6	304.7	302.7	303.7	305.0	304.9	305.2	43.2	90.1
20°	294.3	293.5	291.4	292.2	293.3	293.1	293.5	54.9	145.0
25°	280.9	280.2	277.7	277.9	278.8	278.5	278.8	64.6	209.6
30°	265.9	265.3	262.4	261.6	261.9	261.4	261.7	72.0	281.6
35°	249.2	248.5	245.6	243.7	242.9	242.2	242.4	77.0	358.5
40°	231.6	230.8	227.5	224.6	222.7	221.4	221.6	79.5	438.0
45°	212.9	211.8	208.5	204.2	201.3	199.0	199.4	79.5	517.5
50°	193.7	192.3	188.8	183.7	179.4	175.9	176.0	77.3	594.9
55°	174.1	172.4	168.8	162.7	157.2	152.3	152.1	73.1	667.9
60°	153.8	152.1	148.1	141.4	134.9	128.8	127.5	66.9	734.9
65°	133.1	131.4	127.0	119.9	112.8	105.5	102.8	59.2	794.0
70°	112.0	110.4	105.0	98.0	90.2	82.2	78.2	49.9	843.9
75°	90.5	88.8	83.0	75.7	67.3	58.8	53.6	39.3	883.2
80°	69.4	67.4	62.0	54.0	45.3	36.4	30.4	28.3	911.6
85°	51.2	49.1	43.8	35.9	26.7	17.7	11.3	18.6	930.2
90°	40.3	38.3	33.0	25.3	16.4	7.5	1.9	12.9	943.1
95°	36.9	35.1	30.2	22.8	14.1	5.6	1.6	11.6	954.7
100°	33.7	31.9	27.1	20.1	11.9	4.0	1.5	10.1	964.8
105°	30.1	28.5	23.8	17.3	9.5	2.6	1.3	8.6	973.4
110°	26.5	24.6	20.5	14.4	7.3	1.5	1.2	7.1	980.4
115°	22.8	21.1	17.3	11.6	5.2	1.3	1.2	5.7	986.1
120°	19.1	17.5	14.1	8.9	3.4	1.3	1.1	4.4	990.5
125°	15.4	13.9	10.8	6.2	1.7	1.2	1.0	3.2	993.6
130°	11.8	10.5	7.7	3.9	1.4	1.2	1.0	2.2	995.8
135°	8.3	7.2	5.0	2.0	1.4	1.2	1.1	1.4	997.2
140°	5.1	4.3	2.5	1.6	1.3	1.1	1.0	0.8	998.0
145°	2.4	2.0	1.8	1.6	1.4	1.2	1.2	0.5	998.5
150°	1.9	1.9	1.8	1.5	1.4	1.3	1.2	0.4	999.0
155°	1.8	1.8	1.6	1.5	1.4	1.3	1.3	0.4	999.3
160°	1.6	1.6	1.5	1.5	1.4	1.4	1.3	0.3	999.6
165°	1.5	1.5	1.4	1.4	1.4	1.4	1.3	0.2	999.8
170°	1.4	1.4	1.4	1.4	1.4	1.4	1.3	0.1	999.9
175°	1.3	1.3	1.3	1.4	1.4	1.4	1.3	0.1	1000.0
180°	1.3	1.3	1.3	1.3	1.3	1.3	1.3	0.0	1000.0

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<b>UGR-Table</b>	<b>Standard room</b>	<b>siteco</b>
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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	19.6	18.3	20.0	20.3	17.7	19.5	18.1	19.8	20.1
	3H	19.7	21.3	20.1	21.6	22.0	19.3	20.9	19.7	21.2	21.5
	4H	20.6	22.0	21.0	22.4	22.8	19.9	21.4	20.3	21.7	22.1
	6H	21.3	22.6	21.7	23.0	23.4	20.3	21.7	20.7	22.1	22.5
	8H	21.6	22.9	22.0	23.3	23.7	20.5	21.8	20.9	22.1	22.5
	12H	21.9	23.1	22.3	23.5	23.9	20.5	21.8	21.0	22.2	22.6
4H	2H	18.7	20.1	19.0	20.5	20.9	18.5	20.0	18.9	20.3	20.7
	3H	20.7	21.9	21.1	22.3	22.7	20.3	21.5	20.7	21.9	22.3
	4H	21.6	22.8	22.1	23.2	23.6	21.0	22.2	21.4	22.6	23.0
	6H	22.5	23.5	22.9	23.9	24.4	21.5	22.5	22.0	23.0	23.4
	8H	22.9	23.8	23.3	24.3	24.7	21.7	22.6	22.2	23.1	23.5
	12H	23.3	24.1	23.7	24.5	25.0	21.8	22.7	22.3	23.1	23.6
8H	4H	22.0	22.9	22.4	23.3	23.8	21.4	22.4	21.9	22.8	23.3
	6H	23.0	23.8	23.5	24.2	24.7	22.1	22.9	22.6	23.4	23.9
	8H	23.5	24.2	24.0	24.7	25.2	22.3	23.1	22.8	23.5	24.0
	12H	24.0	24.6	24.5	25.1	25.6	22.5	23.1	23.0	23.6	24.1
12H	4H	22.0	22.9	22.5	23.3	23.8	21.5	22.3	22.0	22.8	23.3
	6H	23.1	23.8	23.6	24.3	24.8	22.3	22.9	22.8	23.4	23.9
	8H	23.6	24.2	24.1	24.7	25.3	22.5	23.1	23.1	23.6	24.2

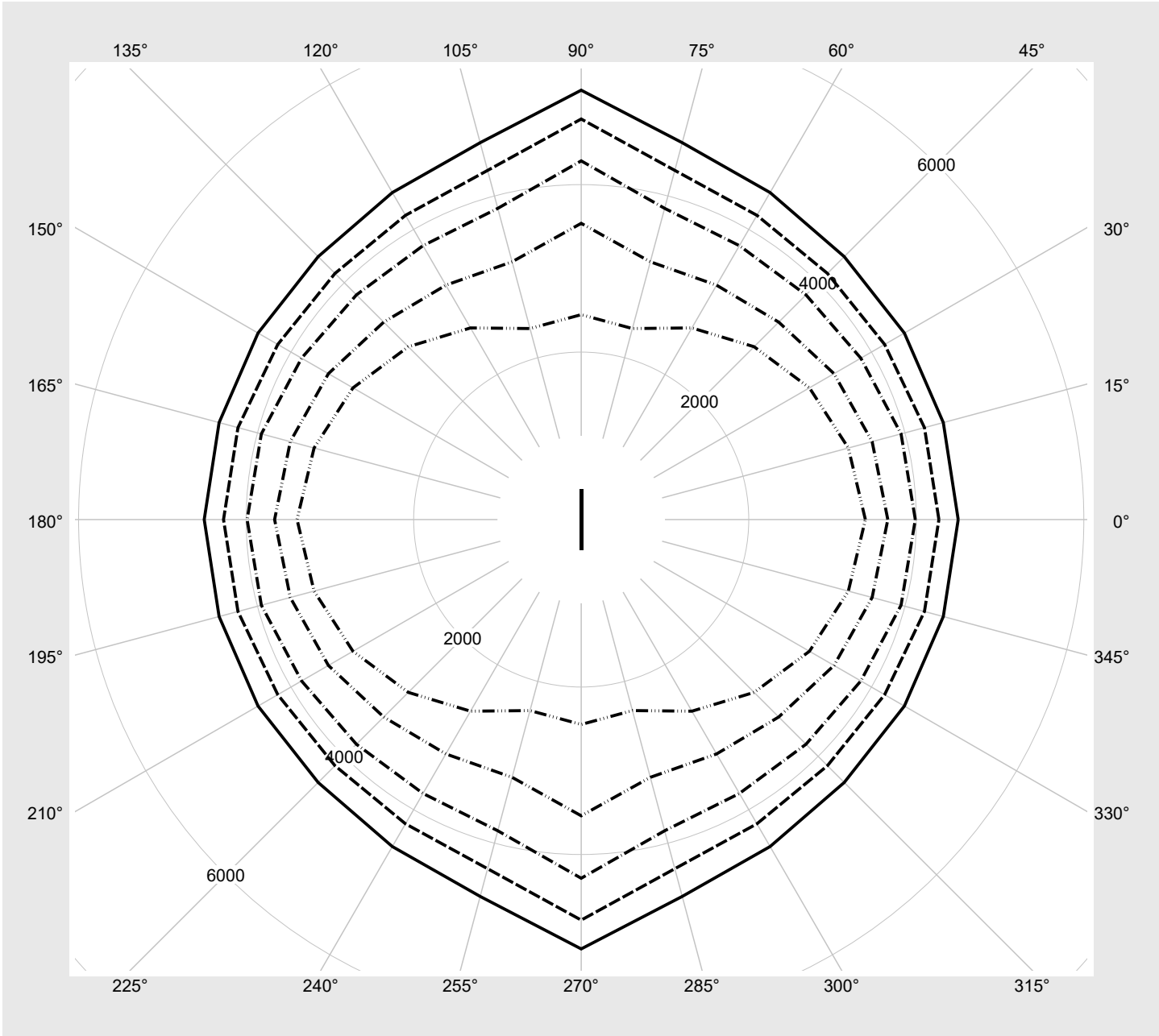
<b>Luminance table</b>	<b>Max. for <math>\gamma \geq 65^\circ</math></b>	<b>Photometric dimensions in mm:</b>	<b>L = 1590</b>	<b>H(C0) = 21</b>	<b>H(C180) = 21</b>
			<b>B = 87</b>	<b>H(C90) = 21</b>	<b>H(C270) = 21</b>

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°		5261.3	5254.0	5259.9	5308.3	5452.1	5676.0	6034.8	
50°		5075.7	5060.8	5068.8	5103.8	5229.8	5445.7	5845.1	
55°		4895.5	4871.5	4878.8	4893.3	5000.2	5199.8	5643.8	
60°		4702.9	4679.1	4677.2	4676.6	4762.3	4941.9	5407.0	
65°		4500.3	4475.1	4454.6	4440.6	4509.3	4659.6	5127.6	
70°		4269.9	4242.1	4182.8	4157.1	4195.5	4317.1	4783.4	
75°		3988.5	3952.9	3854.6	3794.8	3777.0	3847.7	4283.5	
80°		3660.1	3595.5	3484.8	3334.5	3232.0	3187.1	3537.6	
85°		3392.3	3301.5	3146.0	2918.9	2642.7	2361.8	2446.9	

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**Luminance values in cd/m<sup>2</sup>**        $\gamma$  65°      $\gamma$  70°      $\gamma$  75°      $\gamma$  80°      $\gamma$  85°



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<b>Dimming levels table</b>	environmental temperature: 25°C	<b>sITeco</b>
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Luminous flux %	Dimming level linear	Luminous flux [lm]	Power consumption [W] start of lifetime	Power consumption [W] end of lifetime	Power consumption [W] average
100	254	3000	18.9	21.1	20.0
95	241	2849	18.1	20.0	19.0
90	228	2697	17.1	19.1	18.1
85	215	2546	16.3	18.1	17.2
80	203	2405	15.4	17.1	16.2
75	190	2252	14.5	16.1	15.3
70	177	2099	13.6	15.1	14.4
65	164	1946	12.6	14.1	13.4
60	152	1805	11.8	13.1	12.4
55	139	1652	10.9	12.1	11.5
50	126	1498	9.9	11.0	10.4
45	114	1355	9.1	10.1	9.6
40	101	1200	8.2	9.1	8.6
35	88	1045	7.3	8.1	7.7
30	76	902	6.6	7.2	6.9
25	63	746	5.7	6.2	6.0
20	51	601	5.0	5.4	5.2
15	38	445	4.2	4.4	4.3
10	26	301	3.5	3.7	3.6
5	14	156	3.0	3.1	3.0