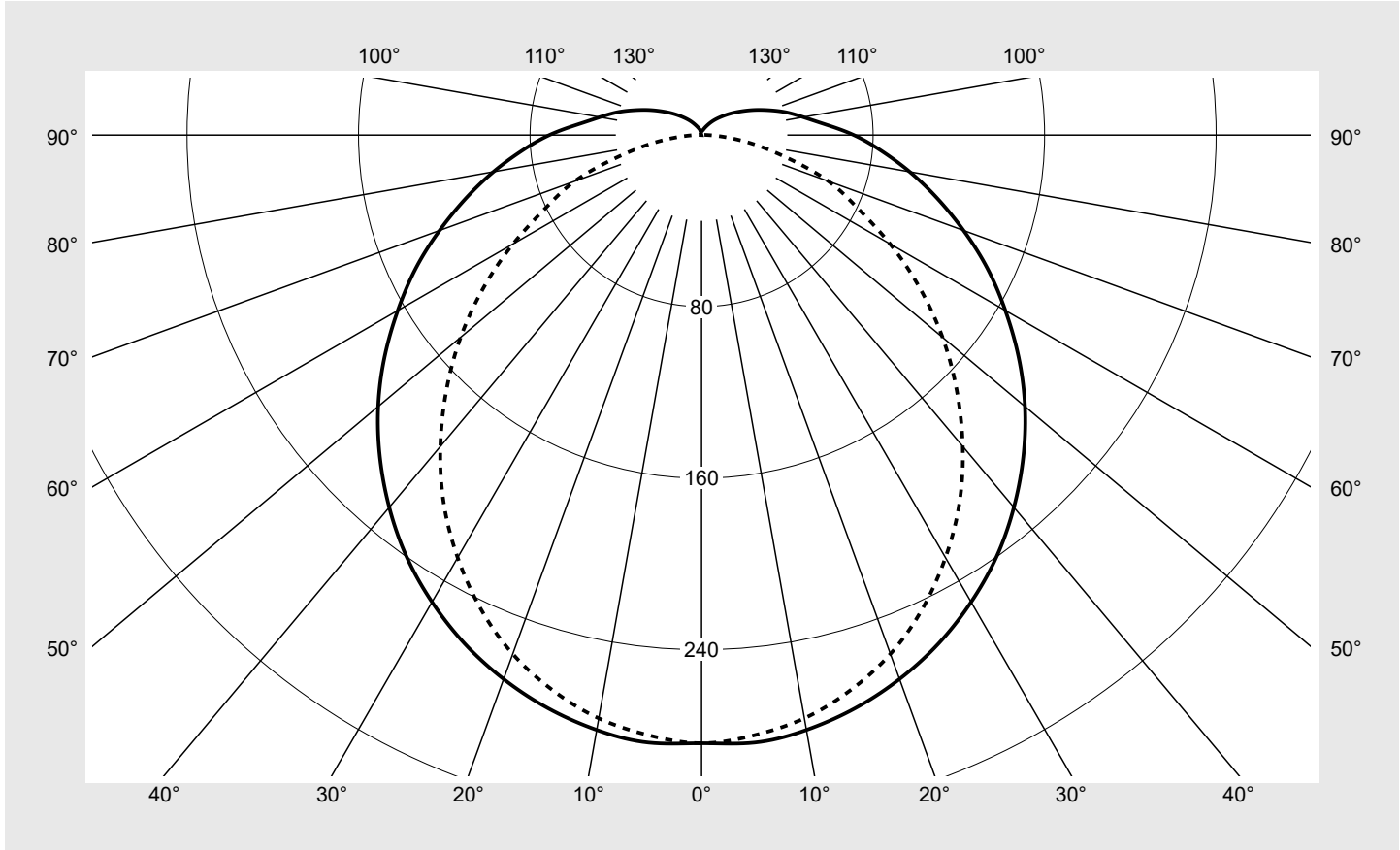


# Photometric test report

<b>Family</b> <b>Monsun® 31 tube</b>	<b>Order number: 51FT10DN460A</b> <b>EAN: 4058352701317</b>	<b>LP number</b> <b>59360_2</b>
	<b>Version</b> tubular luminaire, diffuser, opal, PMMA, diffuse beam	<b>serial documentation</b> <b>16.12.2022</b>
	<b>Lamps</b> LED 4000 K   CRI ≥ 80	
	<b>Controlgear</b> ECG-DALI	
	<b>Rated values</b> Net luminous flux = 6500 lm Power consumption = 40.0 W Luminous efficacy = 162.5 lm/W	
		

**Luminous intensity in cd/klm** C180-0 C270-90 **Imax: 284 cd/klm**



Classifications	
DIN 5040	A 3 1
CIE	N1=42 N2=71 N3=90 N4=91 N5=100

Luminaire light output ratios	
$\eta_{LB}$	100.0%
$\phi_u$	90.8%
$\phi_o$	9.2%

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

## Photometric test report

Family <b>Monsun® 31 tube</b>	Order number: <b>51FT10DN460A</b> EAN: <b>4058352701317</b>	LP number <b>59360_2</b>
Table of values for luminous intensities		
Maximum luminous intensity		

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°	283.6	283.6	283.6	283.6	283.6	283.6	283.6	1.7	1.7
5°	284.4	283.4	282.8	282.0	282.0	281.5	281.0	13.5	15.2
10°	281.7	280.4	279.5	278.1	277.8	276.7	276.2	26.5	41.7
15°	276.7	275.3	274.0	271.9	270.5	269.1	268.1	38.6	80.3
20°	270.0	268.6	266.5	263.5	260.9	258.7	257.5	49.4	129.7
25°	261.6	259.6	256.8	252.3	248.5	245.1	243.7	58.5	188.2
30°	251.5	249.2	245.3	239.6	234.0	229.7	227.5	65.7	253.9
35°	239.9	237.4	232.6	225.2	217.9	212.2	209.7	70.7	324.6
40°	226.6	223.6	218.0	208.6	200.0	192.3	189.5	73.4	398.1
45°	212.2	209.3	202.2	191.6	180.8	172.0	168.3	74.0	472.1
50°	196.9	193.9	185.8	174.0	161.4	150.9	146.7	72.6	544.8
55°	180.5	176.9	168.7	155.1	141.1	128.6	124.2	69.0	613.8
60°	163.6	160.4	151.4	137.2	121.1	107.5	101.5	64.1	677.9
65°	147.1	143.6	134.5	119.6	102.1	86.9	80.1	58.0	735.9
70°	130.0	126.3	117.6	102.1	84.2	67.3	63.0	51.0	786.9
75°	113.8	110.6	101.3	86.0	68.5	49.3	41.6	43.5	830.4
80°	98.6	95.6	86.7	71.6	53.4	34.6	25.1	36.3	866.7
85°	84.2	81.7	73.1	59.3	41.4	22.1	11.4	29.6	896.4
90°	71.0	68.7	61.5	48.4	31.2	13.2	3.2	23.8	920.1
95°	57.8	54.6	46.9	36.3	23.0	8.1	1.4	18.1	938.2
100°	48.2	45.7	38.0	27.2	14.9	4.7	1.1	14.0	952.2
105°	40.9	38.3	31.9	22.4	11.7	3.6	1.1	11.4	963.5
110°	33.8	31.8	26.4	18.2	9.2	3.0	1.2	9.1	972.6
115°	27.7	26.2	21.5	14.5	7.0	2.5	1.2	7.1	979.8
120°	22.4	21.1	17.2	11.0	5.5	2.2	1.2	5.4	985.2
125°	18.1	17.0	13.5	8.6	4.5	2.0	1.3	4.1	989.3
130°	14.4	13.5	10.4	6.8	3.8	1.9	1.3	3.1	992.4
135°	11.4	10.6	8.0	5.5	3.2	1.8	1.4	2.3	994.7
140°	9.0	8.2	6.3	4.5	2.7	1.7	1.4	1.7	996.4
145°	6.9	6.3	4.9	3.6	2.4	1.7	1.4	1.2	997.6
150°	5.1	4.5	3.8	2.9	2.1	1.7	1.5	0.8	998.5
155°	3.9	3.4	3.0	2.4	2.0	1.7	1.6	0.6	999.1
160°	3.0	2.7	2.4	2.1	1.9	1.7	1.6	0.4	999.5
165°	2.4	2.2	2.1	1.9	1.8	1.7	1.6	0.3	999.7
170°	2.1	1.9	1.9	1.8	1.7	1.7	1.6	0.2	999.9
175°	1.9	1.8	1.8	1.7	1.7	1.7	1.6	0.1	1000.0
180°	1.7	1.7	1.7	1.7	1.7	1.7	1.7	0.0	1000.0

## Photometric test report

<b>Family</b> <b>Monsun® 31 tube</b>	<b>Order number: 51FT10DN460A</b> <b>EAN: 4058352701317</b>	<b>LP number</b> <b>59360_2</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	21.2	22.9	21.5	23.2	23.6	20.3	22.1	20.6	22.4	22.7
	3H	23.1	24.7	23.5	25.1	25.4	21.7	23.3	22.1	23.7	24.0
	4H	24.1	25.6	24.5	26.0	26.3	22.3	23.8	22.6	24.1	24.5
	6H	25.0	26.4	25.4	26.8	27.2	22.7	24.1	23.1	24.5	24.9
	8H	25.5	26.8	25.9	27.2	27.6	22.8	24.2	23.2	24.6	25.0
	12H	25.9	27.2	26.3	27.5	28.0	22.9	24.2	23.3	24.6	25.0
4H	2H	21.8	23.4	22.2	23.7	24.1	21.2	22.7	21.6	23.0	23.4
	3H	24.0	25.4	24.5	25.8	26.2	22.8	24.1	23.2	24.5	24.9
	4H	25.2	26.4	25.6	26.8	27.2	23.5	24.7	23.9	25.1	25.5
	6H	26.3	27.3	26.7	27.8	28.2	24.0	25.1	24.5	25.5	26.0
	8H	26.8	27.8	27.3	28.2	28.7	24.2	25.2	24.7	25.7	26.1
	12H	27.4	28.2	27.8	28.7	29.2	24.4	25.3	24.8	25.7	26.2
8H	4H	25.5	26.5	26.0	27.0	27.4	24.1	25.1	24.6	25.5	26.0
	6H	26.8	27.7	27.3	28.1	28.6	24.9	25.7	25.3	26.2	26.7
	8H	27.5	28.3	28.0	28.8	29.3	25.2	25.9	25.7	26.4	26.9
	12H	28.2	28.9	28.7	29.4	29.9	25.4	26.1	25.9	26.6	27.1
12H	4H	25.6	26.5	26.0	26.9	27.4	24.3	25.2	24.8	25.6	26.1
	6H	26.9	27.7	27.4	28.2	28.7	25.1	25.9	25.6	26.3	26.9
	8H	27.7	28.4	28.2	28.9	29.4	25.5	26.2	26.0	26.7	27.2

<b>Luminance table</b>	<b>Max. for <math>\gamma \geq 65^\circ</math></b>	<b>Photometric dimensions in mm:</b>	<b>L = 1420</b>	<b>H(C0) = 35</b>	<b>H(C180) = 35</b>
			<b>B = 70</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°		13083.4	13051.1	13048.9	13091.8	13374.6	14083.4	15565.8	
50°		12551.5	12522.6	12470.2	12452.0	12647.5	13302.4	14923.7	
55°		12007.6	11933.9	11885.3	11748.3	11853.3	12369.9	14156.8	
60°		11467.2	11425.1	11314.8	11125.6	11056.5	11480.6	13274.9	
65°		10983.4	10918.1	10791.7	10525.0	10288.9	10521.2	12387.0	
70°		10473.4	10377.6	10267.7	9899.5	9542.6	9492.8	12050.6	
75°		10029.0	9974.5	9782.0	9370.4	8951.1	8395.5	10522.4	
80°		9675.9	9633.1	9450.3	8968.6	8317.3	7504.8	9435.2	
85°		9403.4	9400.3	9221.5	8821.4	8053.7	6694.4	8551.1	

**Photometric test report**

<b>Family</b> <b>Monsun® 31 tube</b>	<b>Order number: 51FT10DN460A</b> <b>EAN: 4058352701317</b>	<b>LP number</b> <b>59360_2</b>
-----------------------------------------	----------------------------------------------------------------	------------------------------------

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

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

**siteco**

