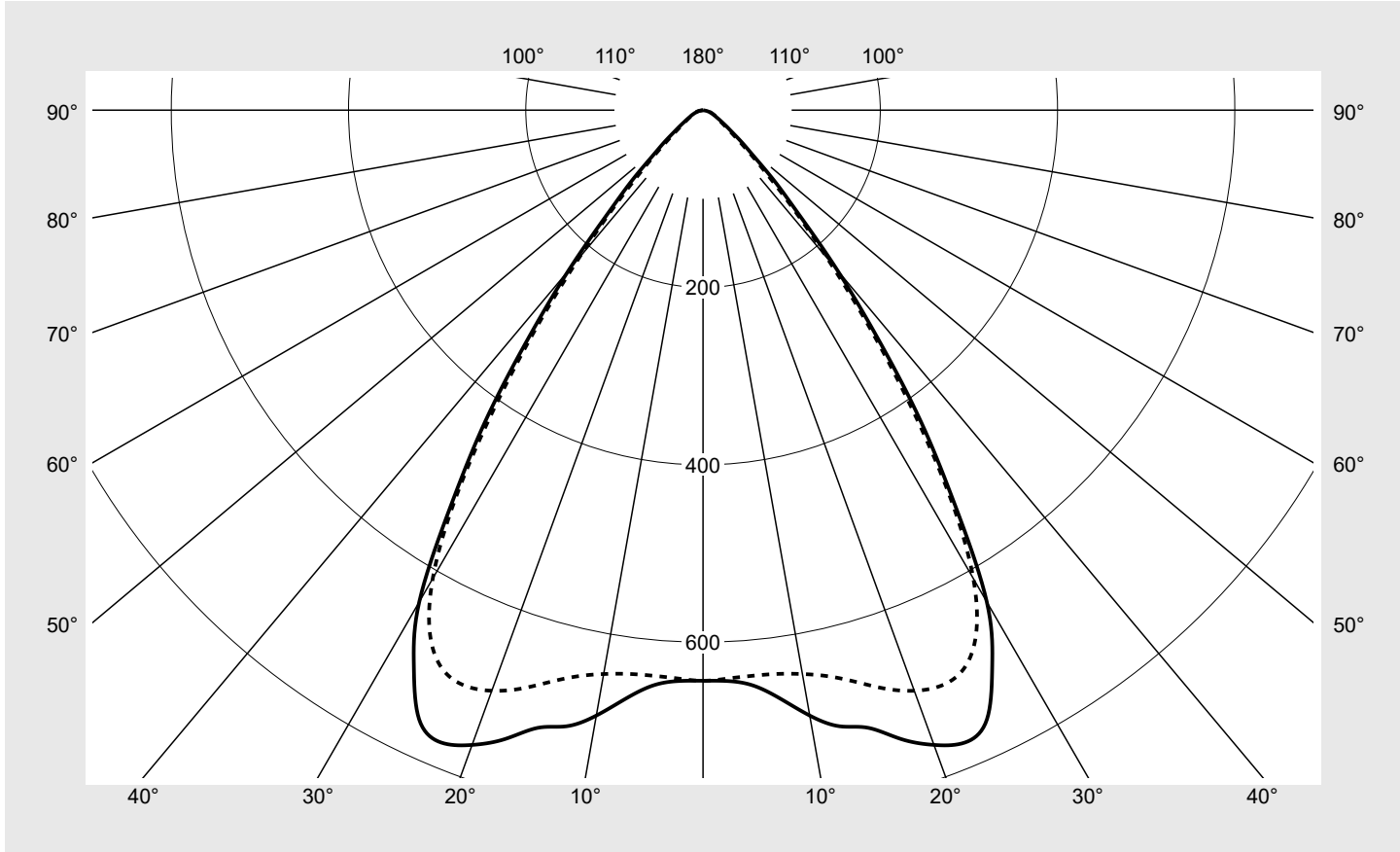


# Photometric test report

<b>Family</b> <b>Highbay 11</b>	<b>Order number: 51HN12DA5MDA</b> <b>EAN: 4069025424655</b>	<b>LP number</b> <b>59710_423</b>
	<b>Version</b> primary light control with lens, PMMA, housing, white, wide distribution	<b>serial documentation</b> <b>10.04.2025</b>
	<b>Lamps</b> LED 5000 K   CRI ≥ 80 <b>Controlgear</b> ECG-DALI <b>Setting</b> AC-mode <b>Rated values</b> Net luminous flux = 27890 lm Power consumption = 146.6 W Luminous efficacy = 190.2 lm/W	



Luminous intensity in cd/klm C180-0 C270-90 Imax: 772 cd/klm



Classifications	
DIN 5040	A 6 0
CIE	N1=88 N2=98 N3=100 N4=100 N5=100

Luminaire light output ratios	
$\eta_{LB}$	100.0%
$\phi_u$	100.0%
$\phi_o$	0.0%

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

## Photometric test report

Family Highbay 11	Order number: 51HN12DA5MDA EAN: 4069025424655	LP number 59710_423
Table of values for luminous intensities		Maximum luminous intensity
		<b>sITeco</b>

C-planes $\gamma$	0° 180°	15° 165° 195° 345°	30° 150° 210° 330°	45° 135° 225° 315°	60° 120° 240° 300°	75° 105° 255° 285°	90° 270°	Luminous flux in lm/klm	
								Phi-zone	Total Phi-zone
Luminous intensity in cd/klm								Luminous flux in lm/klm	
0,0°	643.6	643.6	643.6	643.6	643.6	643.6	643.6	1.0	1.0
2,5°	644.5	645.1	645.0	644.3	644.2	643.7	641.7	7.7	8.7
5,0°	651.5	652.3	650.7	647.5	645.3	643.2	640.4	15.5	24.1
7,5°	669.6	669.1	664.2	657.2	651.2	645.8	641.3	23.5	47.6
10,0°	693.4	691.0	681.5	670.0	659.9	651.2	645.8	31.9	79.6
12,5°	711.8	709.4	700.3	685.9	671.9	660.7	654.0	40.7	120.2
15,0°	721.3	721.7	717.1	704.9	689.4	675.9	667.7	49.7	169.9
17,5°	743.8	740.8	737.9	726.5	708.9	693.0	684.2	59.4	229.3
20,0°	761.9	761.9	759.6	745.2	724.0	705.6	696.8	69.2	298.5
22,5°	772.0	771.2	770.0	754.7	731.1	710.8	702.6	78.2	376.7
25,0°	758.1	756.6	756.3	743.6	722.7	703.3	695.6	85.1	461.8
27,5°	706.7	709.5	709.5	700.0	685.7	672.3	667.0	87.8	549.7
30,0°	640.4	635.6	633.7	626.6	621.7	614.1	609.9	85.8	635.5
32,5°	530.6	537.6	535.6	526.2	530.2	524.1	520.8	78.1	713.6
35,0°	428.2	426.4	425.9	411.9	420.8	414.2	411.4	66.0	779.6
37,5°	322.5	323.4	327.0	311.0	319.4	310.8	308.2	53.0	832.6
40,0°	236.1	234.0	241.6	230.8	230.9	219.8	218.4	40.7	873.3
42,5°	162.3	165.3	172.9	171.1	161.7	151.3	150.8	30.2	903.5
45,0°	117.3	114.9	119.4	122.5	109.3	102.6	102.3	21.9	925.4
47,5°	80.5	81.4	82.8	85.5	75.2	71.4	70.8	15.9	941.3
50,0°	59.4	58.0	58.0	59.0	52.9	50.5	49.6	11.7	953.0
52,5°	43.3	42.8	42.8	43.0	39.3	37.2	36.6	8.9	961.8
55,0°	33.3	32.4	32.9	33.7	30.5	28.7	28.3	7.1	968.9
57,5°	25.9	25.4	25.9	26.8	24.5	22.9	22.9	5.8	974.7
60,0°	20.9	20.2	21.2	21.8	20.4	18.9	19.2	4.9	979.5
62,5°	16.9	16.2	17.4	18.0	17.2	15.9	16.4	4.1	983.6
65,0°	14.9	13.6	14.4	15.1	14.8	13.6	14.4	3.6	987.2
67,5°	12.3	11.4	12.5	12.4	13.0	11.7	12.6	3.1	990.3
70,0°	10.4	9.5	10.5	10.1	11.1	10.1	11.0	2.7	993.0
72,5°	8.2	7.7	7.9	8.2	8.7	8.6	9.5	2.2	995.2
75,0°	6.5	6.0	6.0	6.4	6.6	7.1	7.9	1.7	996.9
77,5°	4.5	4.3	4.4	4.7	5.1	5.6	6.3	1.3	998.2
80,0°	2.9	2.7	2.9	3.1	3.5	4.1	4.7	0.9	999.1
82,5°	1.3	1.4	1.6	1.8	2.2	2.7	3.3	0.5	999.7
85,0°	0.6	0.6	0.6	0.7	1.0	1.4	1.8	0.3	999.9
87,5°	0.3	0.3	0.3	0.3	0.3	0.4	0.5	0.1	1000.0
90,0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0

## Photometric test report

Family Highbay 11	Order number: 51HN12DA5MDA EAN: 4069025424655	LP number 59710_423
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UGR-Table	Standard room	siteco								
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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	22.1	23.4	22.4	23.7	24.0	21.8	23.1	22.1	23.4	23.7
	3H	22.1	23.2	22.5	23.5	23.9	21.8	22.9	22.2	23.3	23.6
	4H	22.1	23.1	22.5	23.5	23.8	21.8	22.9	22.2	23.2	23.6
	6H	22.0	23.0	22.5	23.4	23.7	21.8	22.8	22.3	23.2	23.5
	8H	22.1	22.9	22.5	23.3	23.7	21.9	22.7	22.4	23.1	23.5
	12H	22.1	22.8	22.5	23.2	23.6	21.9	22.7	22.4	23.1	23.5
4H	2H	22.0	23.0	22.4	23.4	23.7	21.7	22.7	22.1	23.1	23.5
	3H	22.0	22.9	22.4	23.3	23.7	21.8	22.6	22.2	23.0	23.4
	4H	22.0	22.8	22.5	23.2	23.6	21.8	22.6	22.2	23.0	23.4
	6H	22.0	22.6	22.5	23.1	23.5	21.8	22.5	22.3	22.9	23.4
	8H	22.0	22.5	22.4	23.0	23.5	21.9	22.4	22.3	22.9	23.4
	12H	22.0	22.4	22.5	22.9	23.4	21.9	22.4	22.4	22.8	23.3
8H	4H	21.9	22.5	22.4	23.0	23.5	21.7	22.3	22.2	22.8	23.3
	6H	21.9	22.4	22.4	22.9	23.4	21.8	22.3	22.3	22.7	23.3
	8H	21.9	22.3	22.4	22.8	23.3	21.8	22.2	22.3	22.7	23.2
	12H	21.9	22.2	22.4	22.7	23.2	21.8	22.2	22.4	22.7	23.2
12H	4H	22.0	22.4	22.4	22.9	23.4	21.8	22.2	22.2	22.7	23.2
	6H	21.9	22.3	22.4	22.8	23.3	21.8	22.2	22.3	22.7	23.2
	8H	21.9	22.2	22.4	22.7	23.3	21.8	22.1	22.3	22.6	23.2

Luminance table	Max. for $\gamma \geq 65^\circ$	Photometric dimensions in mm:	L = 426 B = 264
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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°	
45,0°		41147.2	40290.4	41881.3	42954.8	38321.5	35980.2	35874.3	
50,0°		22925.7	22383.6	22360.1	22759.4	20423.0	19472.7	19138.6	
55,0°		14407.5	14022.2	14222.4	14548.9	13197.7	12406.1	12256.9	
60,0°		10362.5	10003.4	10510.8	10826.3	10136.4	9386.9	9506.5	
65,0°		8743.8	7954.0	8478.0	8843.6	8659.9	8008.6	8461.0	
70,0°		7515.4	6857.0	7585.0	7338.5	8050.5	7328.3	8003.4	
75,0°		6193.6	5736.5	5721.2	6118.8	6357.4	6804.9	7585.8	
80,0°		4181.5	3901.6	4128.7	4460.0	5034.1	5921.0	6749.3	
85,0°		1670.2	1661.7	1715.8	2008.8	2970.6	3957.9	5127.4	

**Photometric test report**

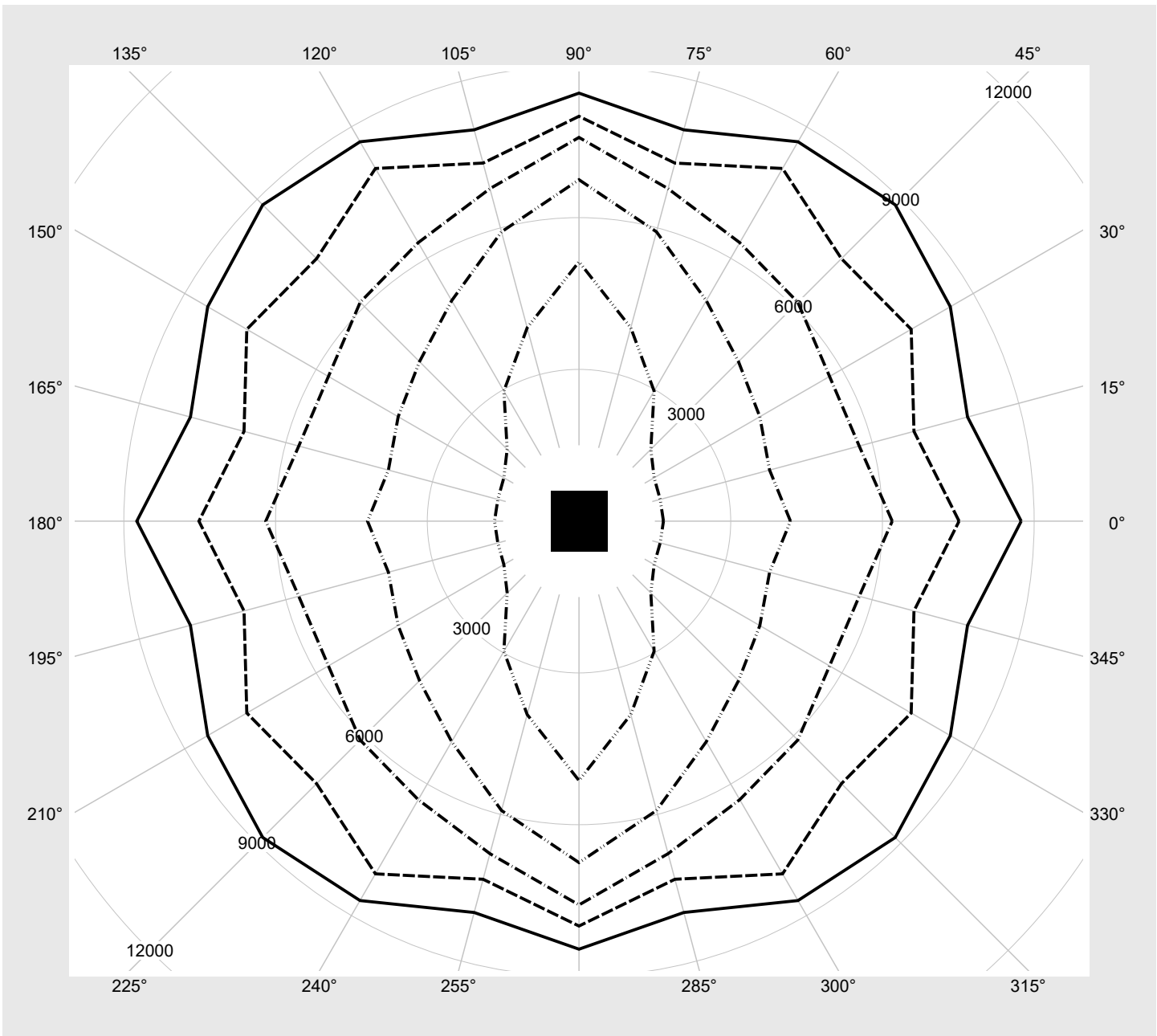
**Family**  
Highbay 11

**Order number: 51HN12DA5MDA**  
**EAN: 4069025424655**

**LP number**  
59710\_423

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

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



## Photometric test report

Family Highbay 11	Order number: 51HN12DA5MDA EAN: 4069025424655	LP number 59710_423
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Dimming levels table	environmental temperature: 25°C	sITeco
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Luminous flux %	Dimming level linear	Dimming level logarithmic	Luminous flux [lm]	Power consumption [W]
100	254	254	27890	146.6
95	240	252	26477	138.2
90	227	250	25143	130.3
85	213	248	23698	121.9
80	200	245	22348	114.2
75	186	243	20885	105.9
70	173	240	19513	98.3
65	160	237	18133	90.7
60	147	234	16732	83.1
55	134	231	15330	75.7
50	121	227	13907	68.3
45	109	223	12582	61.5
40	96	218	11139	54.1
35	84	213	9788	47.3
30	71	207	8314	40.2
25	59	201	6934	33.5
20	47	192	5543	27.0
15	35	181	4132	20.6
10	24	168	2828	14.6
5	12	142	1387	7.8
2	5	110	536	3.9