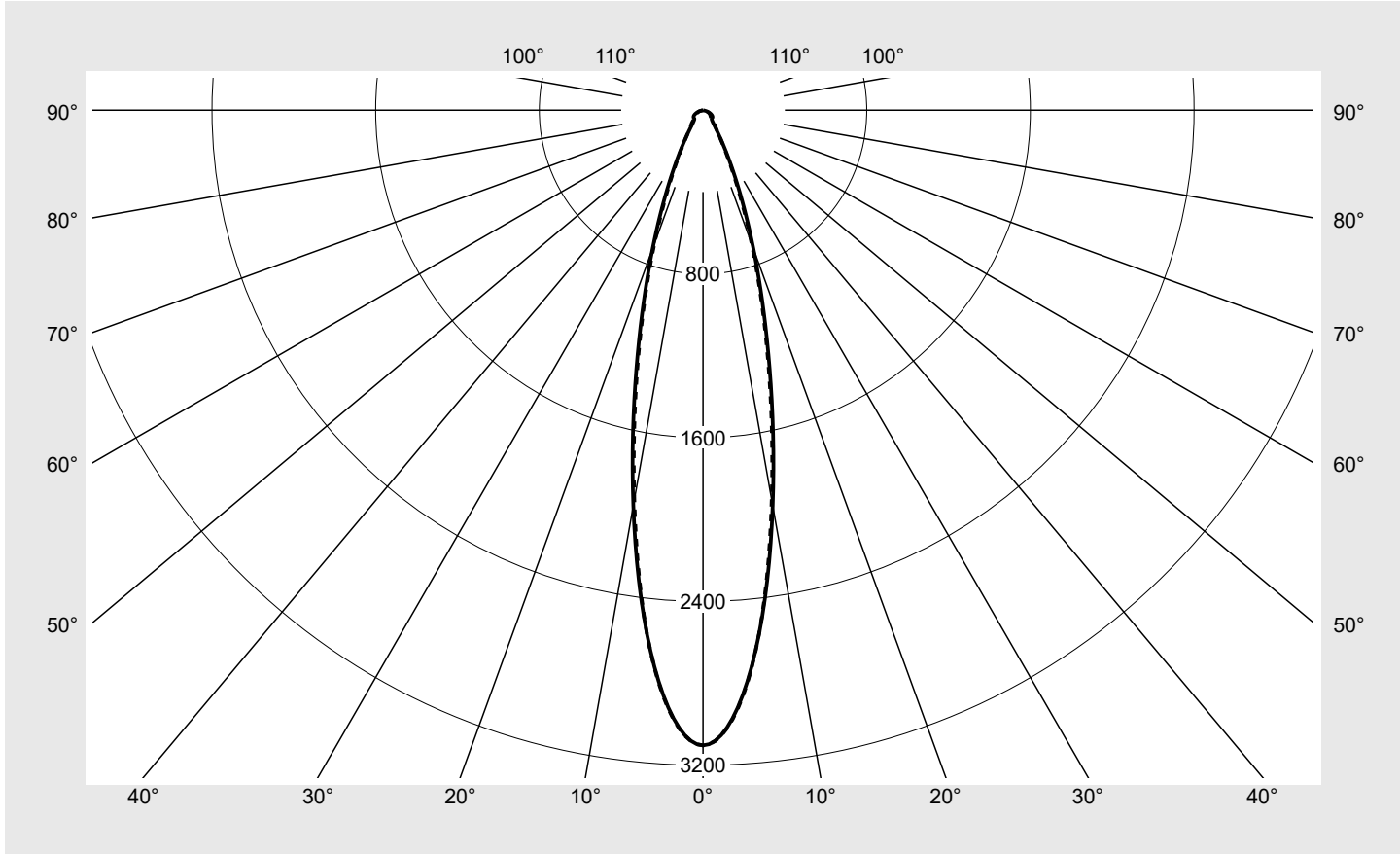


Photometric test report

Family Highbay 11	Order number: 51HLA1D24NLA + 59HL91001 EAN: 4058352361443 + 4058352323519	LP number 58920_21
Version	narrow distribution, UGR≤22, toughened safety glass	serial documentation 31.03.2020
Lamps	LED 4000 K CRI ≥ 80	
Controlgear	ECG-DALI	
Rated values	Net luminous flux = 31240 lm Power consumption = 189.6 W Luminous efficacy = 164.8 lm/W	



Luminous intensity in cd/klm C180-0 C270-90 **Imax: 3103 cd/klm**



Classifications	
DIN 5040	A 7 0
CIE	N1=85 N2=94 N3=99 N4=100 N5=100

Luminaire light output ratios	
η_{LB}	100.0%
ϕ_u	100.0%
ϕ_o	0.0%

Measurement conditions
DIN EN 13032 and DIN 5032

Photometric test report

Family Highbay 11	Order number: 51HLA1D24NLA + 59HL91001 EAN: 4058352361443 + 4058352323519	LP number 58920_21
Table of values for luminous intensities		Maximum luminous intensity
		sITeco

C-planes γ	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°	3103.3	3103.3	3103.3	3103.3	3103.3	3103.3	3103.3	18.6	18.6
5°	2728.1	2725.7	2734.5	2735.8	2731.2	2739.6	2732.7	130.6	149.1
10°	1961.3	1955.1	1962.7	1959.8	1944.6	1940.4	1933.3	185.8	334.9
15°	1234.5	1231.5	1237.4	1233.6	1223.5	1217.2	1209.8	174.2	509.0
20°	720.2	721.2	730.7	731.8	720.5	706.3	696.1	134.9	644.0
25°	391.5	395.5	407.7	412.0	396.6	377.5	368.6	91.5	735.4
30°	203.6	206.8	216.0	219.0	212.4	200.7	194.3	57.3	792.7
35°	109.3	109.5	113.4	118.8	120.5	117.6	115.6	36.3	829.0
40°	71.8	72.6	76.4	83.5	87.0	87.1	87.3	28.5	857.5
45°	59.8	60.1	64.9	71.1	68.6	64.2	62.9	25.2	882.8
50°	58.8	60.0	64.4	66.4	57.1	49.4	48.5	24.6	907.3
55°	56.5	57.6	60.7	58.9	51.3	43.9	43.6	24.1	931.5
60°	50.4	50.7	52.1	52.2	45.2	38.5	38.0	22.4	953.8
65°	40.7	40.4	41.4	42.5	37.1	32.0	31.7	19.0	972.8
70°	28.4	28.2	29.2	30.2	27.5	24.4	24.3	14.2	987.1
75°	15.1	15.6	16.5	18.0	16.8	16.4	16.8	8.8	995.8
80°	5.3	5.6	6.2	6.9	7.4	7.5	9.1	3.7	999.5
85°	0.5	0.5	0.6	0.8	1.1	1.3	1.8	0.5	1000.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
95°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
100°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
105°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
110°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
115°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
120°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
125°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
130°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
135°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
140°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
145°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
150°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
155°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
160°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
165°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
170°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
175°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1000.0
180°	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: 51HLA1D24NLA + 59HL91001 EAN: 4058352361443 + 4058352323519	LP number 58920_21
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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	19.0	20.2	19.4	20.5	20.8	18.0	19.1	18.3	19.5	19.8
	3H	20.5	21.5	20.9	21.8	22.2	19.4	20.4	19.7	20.7	21.1
	4H	20.8	21.8	21.2	22.1	22.5	19.9	20.8	20.3	21.2	21.6
	6H	20.9	21.8	21.4	22.2	22.6	20.2	21.1	20.6	21.4	21.8
	8H	21.0	21.7	21.4	22.1	22.5	20.4	21.1	20.8	21.5	21.9
	12H	21.0	21.6	21.4	22.0	22.4	20.4	21.0	20.8	21.4	21.8
4H	2H	19.7	20.7	20.1	21.0	21.4	19.0	19.9	19.4	20.3	20.7
	3H	21.3	22.1	21.7	22.5	22.9	20.5	21.2	20.9	21.6	22.0
	4H	21.7	22.4	22.1	22.8	23.3	21.0	21.7	21.5	22.1	22.6
	6H	21.8	22.4	22.3	22.9	23.3	21.3	21.9	21.8	22.4	22.9
	8H	21.8	22.3	22.3	22.8	23.3	21.4	22.0	21.9	22.4	22.9
	12H	21.8	22.2	22.3	22.7	23.2	21.4	21.9	21.9	22.3	22.8
8H	4H	21.9	22.4	22.3	22.8	23.3	21.3	21.8	21.7	22.2	22.7
	6H	22.0	22.4	22.5	22.9	23.4	21.6	22.1	22.1	22.5	23.1
	8H	22.0	22.4	22.5	22.9	23.4	21.7	22.1	22.2	22.6	23.1
	12H	21.9	22.3	22.5	22.8	23.3	21.7	22.0	22.2	22.5	23.1
12H	4H	21.9	22.3	22.4	22.8	23.3	21.2	21.7	21.7	22.2	22.7
	6H	22.0	22.4	22.5	22.8	23.4	21.6	22.0	22.1	22.5	23.0
	8H	22.0	22.3	22.5	22.8	23.3	21.7	22.0	22.2	22.5	23.0

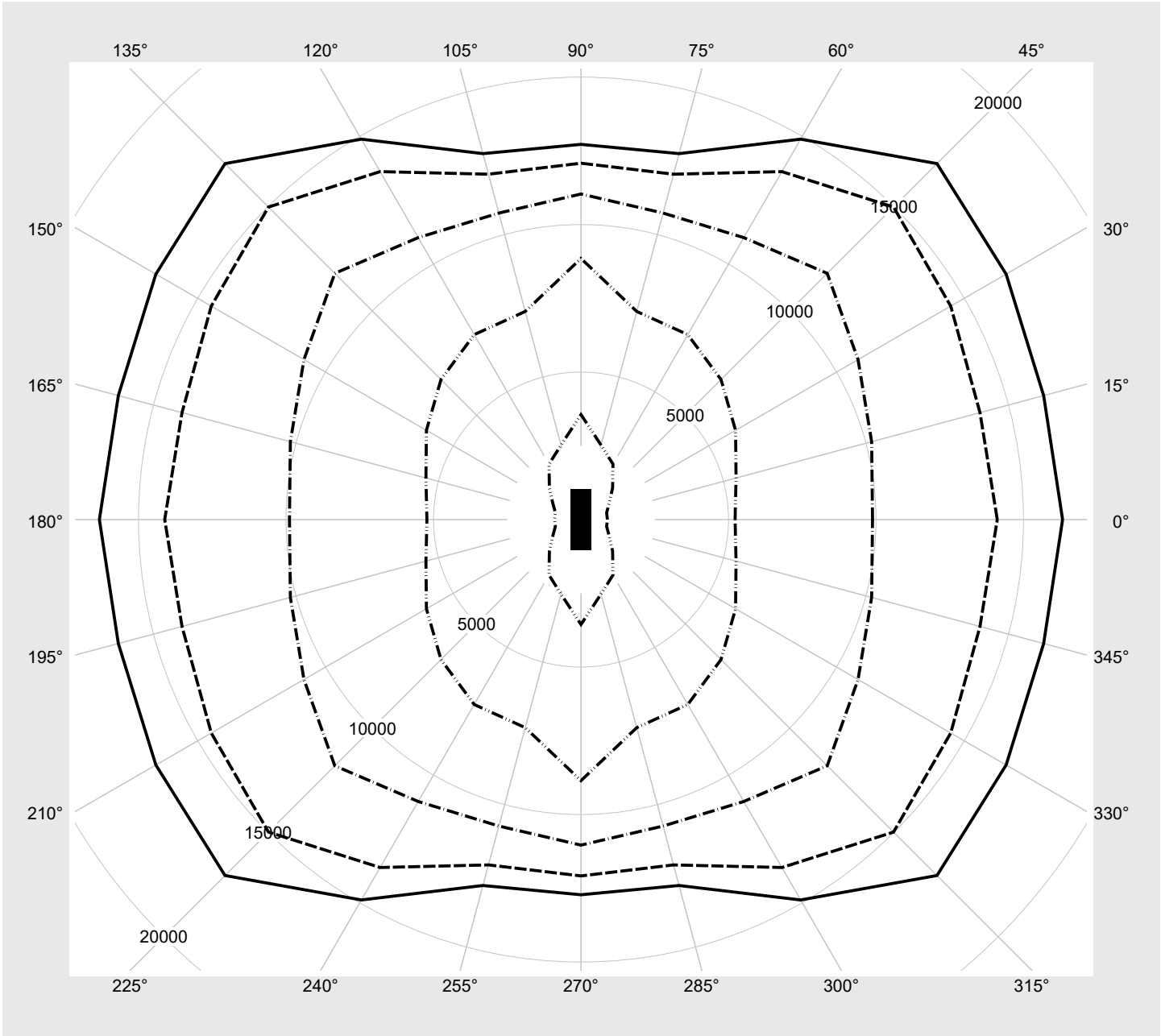
Luminance table	Max. for $\gamma \geq 65^\circ$	Photometric dimensions in mm:	L = 590
			B = 312

C-planes	γ	Luminance in cd/m ²							
		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°		14352.0	14435.3	15572.9	17060.7	16461.2	15417.7	15088.8	
50°		15518.0	15835.9	16992.1	17536.2	15085.1	13055.0	12800.7	
55°		16713.9	17029.9	17969.3	17435.2	15164.4	12990.5	12908.0	
60°		17089.7	17222.4	17697.2	17707.4	15348.5	13062.8	12894.1	
65°		16326.0	16237.3	16641.3	17065.7	14891.2	12843.7	12719.6	
70°		14111.8	14002.6	14472.5	14983.1	13620.6	12121.1	12080.9	
75°		9882.8	10200.1	10844.7	11804.0	11036.8	10756.8	11036.8	
80°		5223.7	5441.7	6050.6	6712.2	7239.9	7303.5	8850.6	
85°		895.7	899.6	1102.1	1514.9	2169.2	2617.0	3557.5	

Photometric test report

Family Highbay 11	Order number: 51HLA1D24NLA + 59HL91001 EAN: 4058352361443 + 4058352323519	LP number 58920_21
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Luminance values in cd/m²
γ 65°
γ 70°
γ 75°
γ 80°
γ 85°
siteco



Photometric test report

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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	31240	189.6
95	240	252	29638	179.0
90	227	250	28132	169.1
85	213	247	26500	158.4
80	200	245	24968	148.5
75	187	243	23421	139.0
70	174	240	21864	129.4
65	161	237	20292	119.8
60	148	234	18710	110.4
55	136	231	17228	101.5
50	123	228	15619	92.1
45	110	224	13996	82.8
40	98	220	12486	74.2
35	86	215	10964	65.6
30	74	210	9428	57.1
25	61	204	7755	48.1
20	49	197	6199	39.5
15	37	188	4631	31.2
10	26	177	3176	23.3
5	14	161	1586	14.9