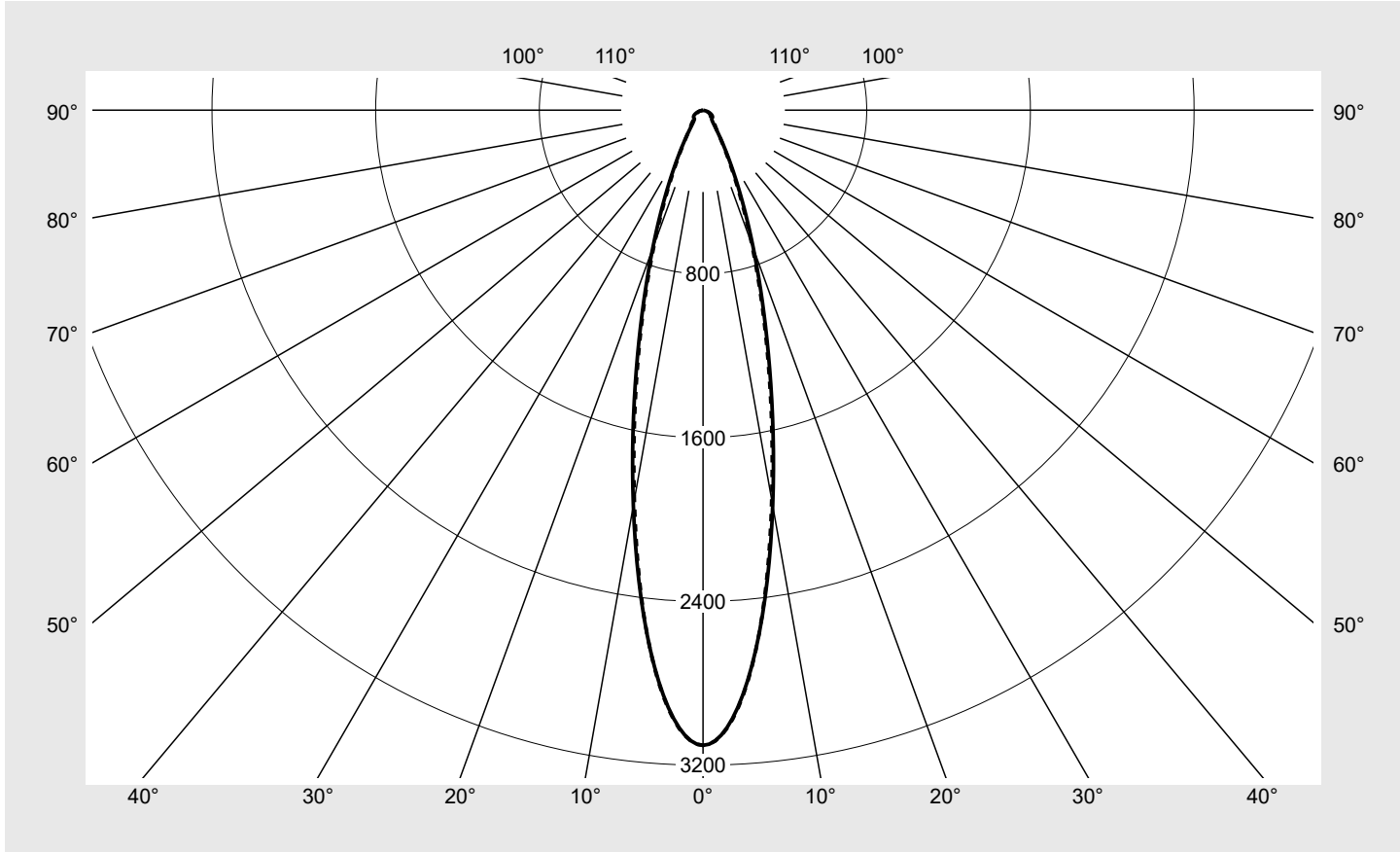


Photometric test report

Family Highbay 11	Order number: 51HLA1D14GLA + 59HL91001 EAN: 4058352361429 + 4058352323519	LP number 58920_20
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 = 15620 lm Power consumption = 94.8 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: 51HLA1D14GLA + 59HL91001 EAN: 4058352361429 + 4058352323519	LP number 58920_20
Table of values for luminous intensities		Maximum luminous intensity



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: 51HLA1D14GLA + 59HL91001 EAN: 4058352361429 + 4058352323519	LP number 58920_20
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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 = 295
			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	

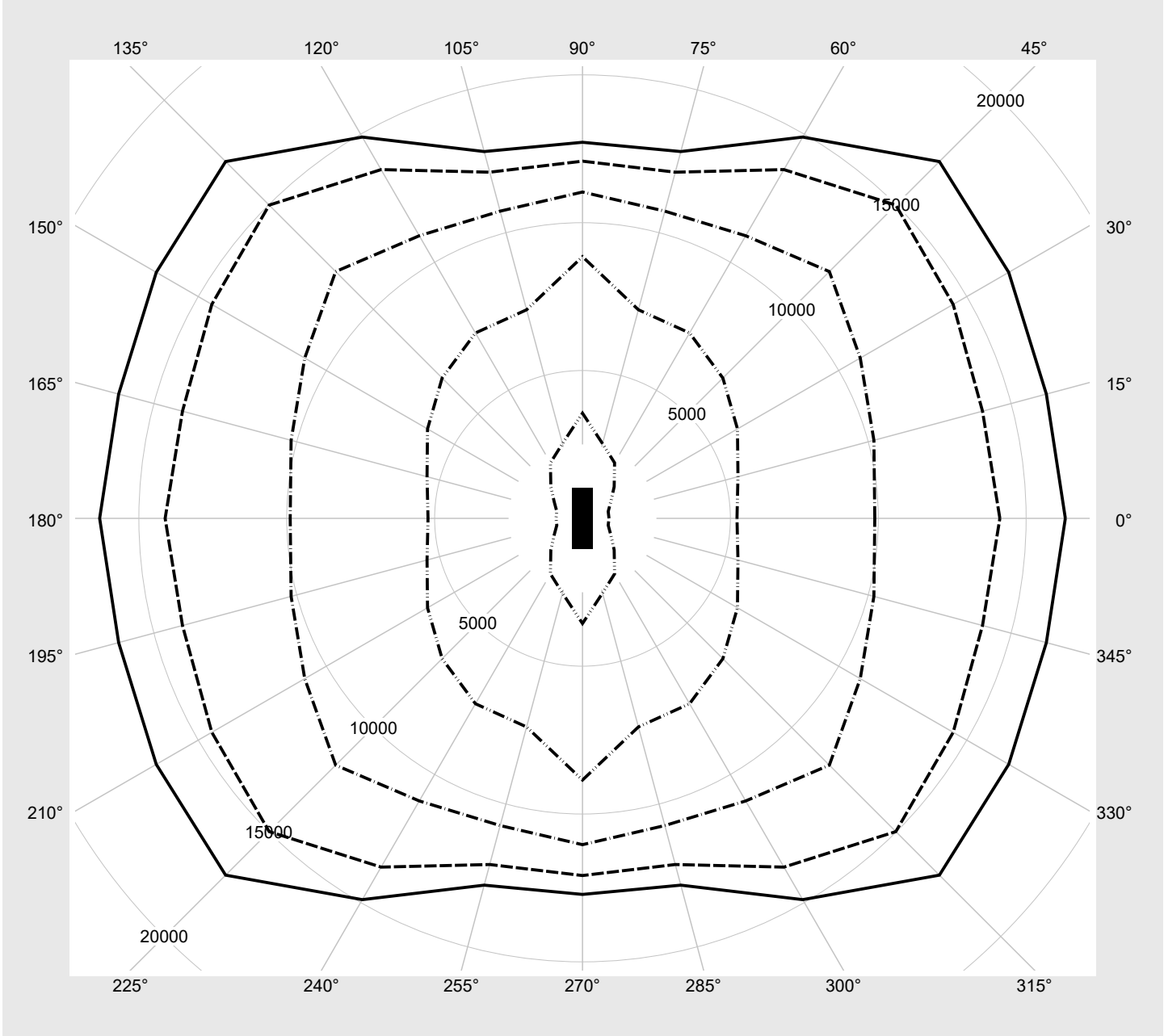
Photometric test report

Family Highbay 11	Order number: 51HLA1D14GLA + 59HL91001 EAN: 4058352361429 + 4058352323519	LP number 58920_20
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Luminance values in cd/m²

γ 65°
 γ 70°
 γ 75°
 γ 80°
 γ 85°



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	15620	94.8
95	240	252	14819	89.5
90	227	250	14065	84.6
85	213	247	13250	79.2
80	200	245	12484	74.2
75	187	243	11710	69.5
70	174	240	10932	64.7
65	161	237	10145	59.9
60	148	234	9355	55.2
55	136	231	8614	50.7
50	123	228	7809	46.0
45	111	224	7060	41.7
40	98	220	6242	37.1
35	86	215	5482	32.8
30	74	210	4714	28.6
25	61	204	3877	24.1
20	49	197	3099	19.8
15	37	188	2315	15.6
10	26	177	1589	11.7
5	14	161	793	7.4